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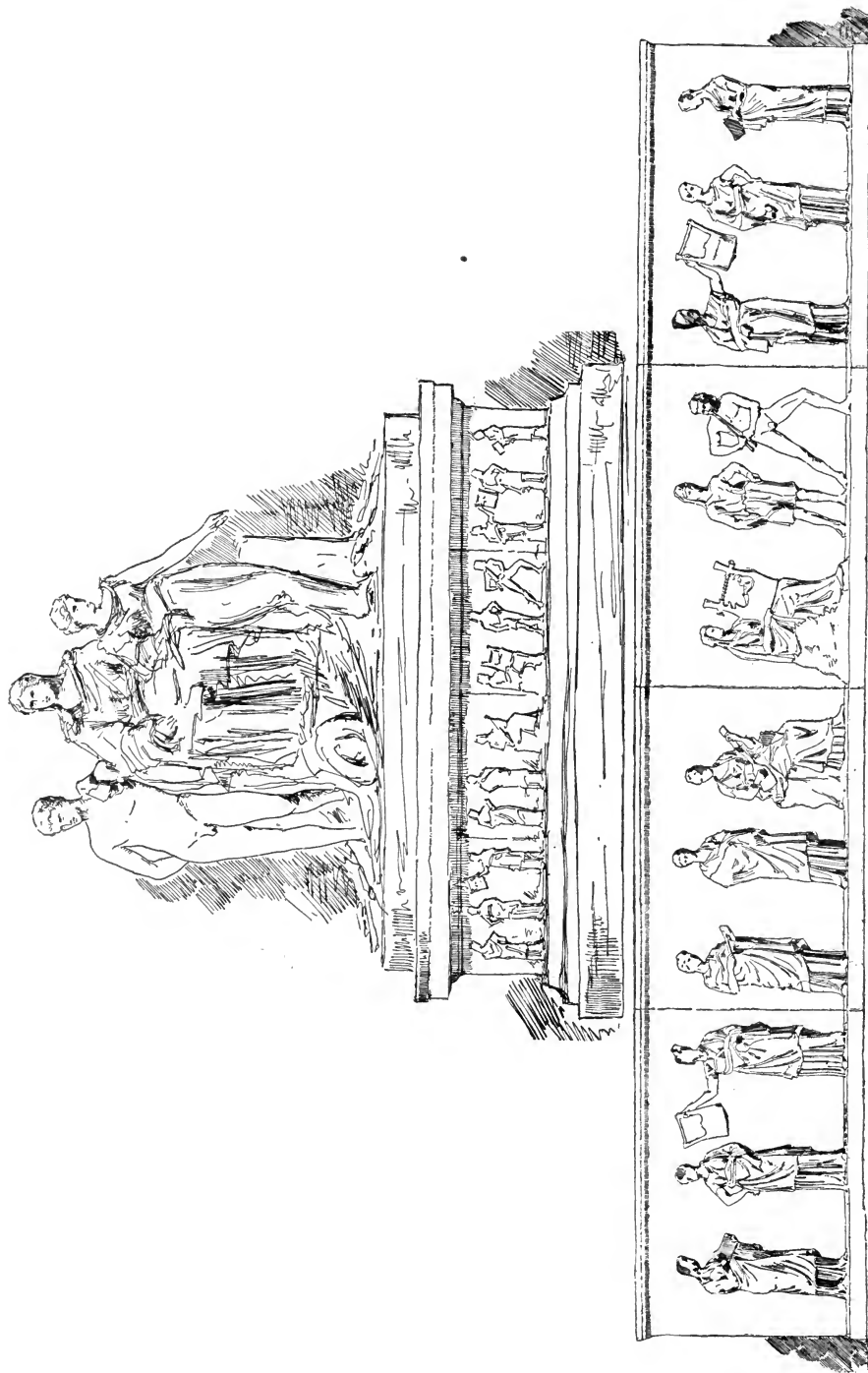
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BASE WITH RELIEF BY PRAXITELES AT MANTINEIA.

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PAPERS OF THE AMERICAN SCHOOL OF CLASSICAL
STUDIES AT ATHENS.
THE MANTINEIAN RELIEFS.*

[PLATES I, II.]

In the year 1887, M. G. Fougères of the French School at Athens, while digging at Mantinea, came upon three slabs of marble bas-reliefs. These M. Fougères published in a very interesting article in the organ of the French school,¹ in which he endeavored to identify these slabs with the reliefs decorating the base of the statues of Leto, Apollo and Artemis in their temple at Mantinea as described by Pausanias (VIII. 9), thereby greatly enhancing the undoubted value of his important discovery. Since then Professor Overbeck,² supported by several other authorities, has denied M. Fougères' identification. It is the object of this paper to adduce further reasons for the ascription of these remains to the reliefs mentioned by Pausanias, and it is hoped that the identification may become conclusive.

The three slabs were found among the ruins of a Byzantine church at Mantinea in which they served as pavement, the face bearing the

*The substance of this paper was read at the opening meeting of the American School of Classical Studies at Athens, Jan. 17, 1890.

¹ *Bull. de corr. hellén.*, XII, 1888, pp. 105 seq., pls. I, II, III. His view is shared by RAVAISSON, *Compte-rendu de l'acad. des inscript.*, etc., 1888, p. 83; LÖSCHCKE, *Jahrbuch d. Instit.*, 1888, p. 192; FURTWÄGLER, *Philolog. Wochenschrift*, 1888, p. 1482.

² *Bericht. d. Königl. Sächs. Gesell. d. Wissensch.*, 1888, pp. 284 seq.; *Gr. Kunstmythologie*, III, pp. 454, 457, where also a full list of other representations of Apollo and Marsyas is given.

reliefs fortunately having been turned downward. They are of white marble, according to M. Fougères possibly from Doliana near Tegea, and are now deposited in the National Museum at Athens where they have been put together carefully under the direction of M. Kabbadias. The plates illustrating M. Fougères' article are from photographs from the originals taken in the museum; but, owing perhaps to insufficient light, and to spots and corrosions which disfigure the marble and interfere more or less with the lines and modelling, they are not as good as they might be. In such cases casts which give all the lines and do not reproduce the accidental staining of the marble may supplement the accurate appreciation of works of antiquity. The authorities of the museum generously made a set of casts which they presented to the American School to illustrate the present paper when read at one of our meetings.

The three slabs are practically of the same dimensions: slab I is 1.35 m. wide by 0.96 m. in height, while slabs II and III are 1.36 m. wide by 0.96 m. and 0.98 m. in height.

The first slab bears three figures of which the first is seated: a dignified male figure with long curls dressed in the long-sleeved talaric chiton, and himation, and holding a large lyre resting upon his knee. There can be no doubt that this figure represents Apollo. At the other end of this slab is a nude bearded older man playing the double pipes, in an attitude half-retreating, half-advancing, which from the well-known type of the Myronian Marsyas will at once be identified as Marsyas. Between these two figures stands a bearded younger man with a head-dress something like a combination of a veil and a Phrygian cap, wearing a chiton with sleeves, *anaxyrides*, and shoes. He holds in his right hand a knife. From this foreign costume, as well as from the type and evident function of the figure, no archæologist can fail to see in him the Scythian slave charged with the execution of Marsyas. The scene suggested by this slab is beyond doubt the first stage in the story of the flaying of Marsyas. It is equally evident that the six female figures holding musical instruments, rolls, and papyri represent six of the nine Muses, and it appears evident that one slab is missing which must have contained the other three Muses. Now, in the passage cited above, Pausanias, in describing Mantinea which he enters by the southeast gate, mentions first a double temple of which one half was dedicated to Asklepios; and he continues: Τὸ δὲ ἕτερον Λητοῦς ἐστὶν ἱερὸν καὶ τῶν παίδων. Πραξιτέλης δὲ τὰ ἀγάλματα εἰργάσατο

τρίτῃ μετὰ Ἀλκαμένην ὕστερον γενεᾷ. τούτων πεποιημένα ἐστὶν ἐπὶ τῷ βᾶθρῳ Μοῦσα καὶ Μαρσύας ἀλῶν. We thus learn that Praxiteles made the three statues of the second half of the temple, namely, Leto with her two children Apollo and Artemis, and that on the base of these statues was portrayed a story of Marsyas and the Muses.

Literally, Pausanias speaks only of "a Muse and Marsyas playing on the pipes;" and M. Fougères solves the difficulty in interpreting this passage, which even before his discovery had been felt, by amending it and substituting the plural *Μοῦσαι* for *Μοῦσα*. Many years ago, De Witte³ suggested that the one Muse who could accompany Marsyas would be Euterpe, who presides over flute-playing; but there is no archæological or literary instance of the conjunction of these two figures known to me, and, as we shall see, this very slab disproves it. It appears possible that Pausanias, who never was a careful and accurate observer of the monuments which he describes loosely, mistook the seated Apollo for a female figure, a Muse, and rapidly noted what he hastily saw, characterizing the whole scene by two figures which he could identify. And this possibility was increased to my mind when I heard that, at the first glance, the discoverers themselves were misled in the same way. Still, perhaps M. Fougères' emendation is the better suggestion, as it includes the figures of all the other slabs,—and as the omission of the letter *ι* at the end of a word is easily made by any scribe.

With this definite passage of Pausanias to go upon, it seemed to me strange that there could be much hesitation in identifying the slabs found at Mantinea with the reliefs decorating the base of the Praxitelean statues; I was therefore astonished to find that most of the leading archæologists here at Athens agreed with Professor Overbeck; for, even before I had read M. Fougères' article and was aware of the provenience of the slabs, I had pointed out these works as important specimens of fourth-century relief work of Praxitelean character.

M. Fougères, rightly assuming that there must have been one more slab bearing three Muses, restores the base of the statues by placing one slab upon each of the four sides of the pedestal, and this restoration has been in the minds of archæologists as the only possible one, ever since the publication of these works. Starting from this conception of their distribution, Professor Overbeck and those who agree

³ *Élite Céramogr.*, II, pl. 70, p. 213, Note 3.

with him direct their strongest criticism against the identification on this ground. But, besides this, he and they also maintain that the reliefs themselves, in the posing of the figures and their relation to one another, and in the modelling of every one, as well as in the general character and artistic feeling of the grouping and of the separate figures, are either Roman or late-Hellenistic in style. Now Professor Overbeck, though he holds that M. Fougères has put it beyond all doubt that the three slabs belong together, and is right in maintaining that they were not part of a continuous frieze, denies that they could have been arranged on the four sides of the *bathron*, inasmuch as this base would have been decidedly too small for the three statues which stood upon it. Though it might be urged, even against this, that we do not know how large the pieces on either side were, into which each one of these slabs may have been set, just as a picture hangs with space about it upon our walls, still it would be hard to conceive of this base as a whole, if so decorated, and supporting the three large temple-statues. Yet, if we can, as I propose, show that all the four slabs formed a continuous composition and decorated only the front of the base, all the weighty arguments of Professor Overbeck and his supporters against the attribution of the reliefs, so far as these arguments depend upon the arrangement formerly proposed, fall to the ground. Now, I will say at once, though it hardly needs much argument, that the reliefs are more likely to have decorated a *bathron* than anything else. As, from the nature of the subject represented, the whole composition consisted of but four slabs, they are not likely to have formed part of an extended architectural decoration, such as a continuous frieze or single metopes. Nor are they likely, for the same reason, to have formed part of a balustrade or screen; nor could they have been fixed upon a sarcophagus. Four slabs of this dimension, evidently belonging together, are structurally most likely to have decorated the large base of some sculptural monument.

The first mistake in judging these works appears to have been made in that an analogy for the base of the three statues by Praxiteles was, unconsciously found in the numerous existing open-air *bathra* discovered at Olympia, Epidauros, and other places. But these interesting bases of statues are chiefly those of athletic and votive figures, and are therefore much smaller in dimensions. They can in no way give us an adequate notion of the size, form, and decoration of the bases belonging to great temple-statues and groups of statues.

Now, as regards the bases of great temple-statues, so far as ancient literary records are concerned, the two about which most was written in antiquity are those of the Olympian Zeus and the Athena Parthenos by Pheidias. As regards the base of the statue of the Olympian Zeus, we learn from Pausanias (v. 11. 8) that it was decorated in relief, that the scene represented the birth of Aphrodite in the presence of all the chief divinities, the action bounded on one side by Helios, rising with his steeds, and, on the other, by Selene descending to the realms of night. The base of the Athena Parthenos was similarly decorated with scenes portraying the birth of Pandora. Fortunately for us, the so-called Lenormant statuette in the British Museum, giving a free copy of the Athena Parthenos, has on the base an imperfect rendering of this scene; but, imperfect as it may be, it shows that the decoration in relief occupied only the front of the base, and did not extend round the four sides. This, moreover, we should naturally have surmised before, inasmuch as it could not have been intended that the visitors should walk round the back of such sacred statues, generally placed toward the west end of the cella, without sufficient space left free at the back for proper appreciation of a relief on the base.

Among extant bases, I would specially draw attention to one decorated with reliefs representing pyrrhic dancers,⁴ now in the Acropolis Museum at Athens, to which my attention was drawn by Mr. Loring of King's College, Cambridge, and the British School at Athens. I shall have occasion to recur to these reliefs for further comparison with the works under discussion. For the present, I merely wish to point out that, though this base belonged to what must have been a much smaller group of figures than ours, as the figures in the relief, cut into the solid stone of the base, are less than half the size of our Muses, it is still instructive as showing sculptured decoration similarly disposed only on the front side.

The most important light, however, upon the disposition of these slabs and the base which they ornamented, is thrown by the important discovery at Lykosoura in the autumn of 1889 of the temple-statues of Damophon of Messene by Messrs. Kabbadias and Leonardos. The temple and the statues there found are beyond a doubt those described by Pausanias (VIII. 38). The date of these works cannot be far re-

⁴ BEULÉ, *L'Acropole d'Athènes*, II, pls. III and IV; RHANGABÉ, *Antiq. hellén.*, pl. XXI; *vide*, also, MICHAELIS in *Rhein. Mus.*, XVII. 217, and *Mittheil. d. deutsch. Arch. Instit. Athen*, I, 295. The inscription is published *CIA*, II. No. 1286.

moved from that of Praxiteles. Now, there were four statues on this base, while there were three on that of Mantinea. By computation, the width of the Lykosoura base would be about eight metres, and on this ratio, a base for only three statues would be about six metres wide. Four slabs of the dimension of our Mantineian reliefs would measure about $5\frac{1}{2}$ metres. Hence, so far as actual measurements would go, four such slabs would suffice, when placed continuously side by side, to decorate the front of the base of a group of temple-statues such as the Leto, Apollo and Artemis at Mantinea in all likelihood formed. Accordingly the arguments of Professor Overbeck, so far as the ordinary dimensions and decoration of such bases are concerned, fall to the ground, and leave unshaken the probability of such an arrangement of the reliefs from Mantinea.

A careful consideration of the composition of these reliefs, necessarily leads us to the same conclusion. There can hardly be a doubt, first, that there was one more slab sculptured with three Muses, and, second, that the slab with Apollo must have occupied a central position. The presence of six Muses necessarily leads us to the conclusion that at the time when these reliefs were made the Muses as accompanying Apollo had been already fixed at the number of nine. I must, however, leave this point for discussion hereafter. Assuming, then, that there were four slabs in all, and that the slab with Apollo occupied the central place, the next questions are whether of the two extant slabs with Muses the one containing the seated Muse is to be placed to right or left of the Apollo slab, and whether the remaining slab is to be placed at the extreme left or right. Mr. H. D. Hale, while a student at the American School at Athens, made the restorations⁵ of the group and the base reproduced on Plate 1. Apart from all other considerations of composition which have led me to place the slabs as they are here given, *i. e.*, the seated Muse immediately beside Apollo and the remaining slab to the left hand of this, there is one, apparently minute, but very interesting fact which finally confirmed me in this arrangement. Of the Muses there are four heads comparatively well preserved. Among these that of the seated Muse and the one immediately beside her are in full-face, while the two others are turned in different directions. The head of the Muse with the pipes

⁵ I need hardly say that the statues are imaginary. The Apollo would probably not have been represented without any drapery. But I think Mr. Hale has been successful in giving a certain fourth-century character to his composition.

is turned to our right in three-quarter view, that of the central figure in the other slab to our left. Now, there is a marked difference in the workmanship of these two heads; the inner side of the face of the Muse with the pipes is carefully finished, while the inner side of the other head is comparatively unfinished, and the contrast is here the greater as the outer side of this head is beautifully worked. It is evident, from this fact, that the inner side of the face of the Muse with the pipes was designed to be prominently visible to the spectator looking at the group of three statues on the base; while the inner side of the other head was not meant to be carefully examined. Placing the slabs as they are here given, and imagining the spectator to stand opposite the centre of the base, the Muse with the pipes presents herself in three-quarter view, the inner side of the face becoming well visible, while the central Muse of the other slab exhibits her head in profile, the profile being exquisitely finished, while the unfinished inner side of the face does not show. Further, the Muse with the papyrus is the only one who has a larger bare space at her back, which gives a proper finish to the composition. I therefore place this slab at the left end. Then follows the other extant slab with Muses, then the slab with Apollo and Marsyas, and on this side the composition was brought to a conclusion by another slab with three standing Muses similar in composition to the slab at the other end. In Mr. Hale's drawing (PL. I, *fig. 2*) the end slab has been repeated on the other side to give some idea of the ensemble of the composition.

This I postulate is the composition decorating the front of the base of the three statues; and with this postulate we will proceed to consider the main features of the composition, first, from the point of view of the subject represented, and, second, from the constructive or tectonic side.

The first task an ancient sculptor at work upon a group consisting of several figures had to deal with, was the proper arrangement of the figures with regard to their relative importance to the scene depicted, and this arrangement must then be modified by the constructive destination of such grouping. It is unnecessary to say that the most important figure or figures must occupy the middle. Moreover, when there were separate slabs, it was desirable, as far as possible, to place the central group on one slab. This is done in the present case by placing Apollo, Marsyas and the Scythian on one slab. If there had been five slabs in our composition, the arrangement would

have been a comparatively easy task ; for thus this slab would have been placed in the middle with two slabs on either side. But then it would have been desirable to place Apollo in the centre of this slab, perhaps with the Scythian on one side and Marsyas on the other. But the difficulty is still further increased by the actual number of figures represented in the whole of this composition. When there is an uneven number of figures, due prominence can easily be given to one figure, by placing it in the middle with an equal number of figures on either side. This is done, for instance, in both the pediments of the Temple of Zeus at Olympia. But when there is an even number of figures, it is not possible, from the considerations of symmetrical composition, to give prominence of place to one figure. In the western pediment of the Parthenon, the centre was equally occupied by two figures of equal importance in the scene enacted ; moreover the sacred olive-tree really occupies the centre of the pediment with Athena and Poseidon in diverging lines on either side. I have several times hitherto pointed out how the careful study of extant ancient compositions forces us to conclude that the ancients studied most minutely such questions of grouping, and I would refer the reader to what I have written on the arrangement of the central figures of the Parthenon Frieze,⁶ where I have endeavored to show that the introduction of the central incident was due, in a great degree, to the desire of giving proper prominence to three figures, viz., Zeus, Hera and Athena. Brunn, Flasch, and Treu, also, have pointed with emphasis to the careful consideration of symmetrical balance in such compositions. Having an even number of figures, namely, twelve, our artist could not place Apollo in the centre. The physical centre in our composition therefore lies between Apollo and the seated Muse. The artist has furthermore emphasized this as the centre by placing two seated figures on either side of the central point. This corresponded probably also to the general arrangement of the statues on the base, in which Leto was probably seated in the middle, while Apollo and Artemis were standing on either side. The discovery at Lykosoura has shown us that the two central figures (Demeter and Despoina) were seated, while Anytos and Artemis were standing on either side. The points immediately on either side of the centre would thus be occupied by two seated figures. But, no doubt, the danger would arise that Apollo

⁶ *Essays on the Art of Pheidias*, pp. 244-253.

and the seated Muse would be made equally prominent. Yet there is one striking point of difference in the compositions where this arrangement obtains. If it had been the intention of the artist to give similar importance to both of the two seated figures grouped on either side of the centre, he would have placed them either face to face or back to back. In the frieze of the Parthenon, Zeus heads the one side of the Assembly of Gods, turned from the centre, and Athena the other, facing in the opposite direction,—an arrangement, too, which is highly conducive to symmetry. In our case, however, the seated Muse is not turned toward the other Muses as if she were heading that side of the composition; but is turned toward Apollo, and, by this attitude, throws the symmetry somewhat out, leaving the preponderance of interest and line toward the other side where what there is of drama is enacted. This is the only element of asymmetry in what is otherwise composed in almost extreme severity of balance. To realize how far this balance goes, I merely point to the fact that, while we have two seated figures in the centre, each with a stringed instrument, we have beside these respectively the only two figures that are approximately in full face. The lines of the arms of these two figures are what might be called rhythmically symmetrical: the arms of the Muse and of the Scythian that are toward the centre are both extended downward in a flattish curve, diverging from the centre; the arms away from the centre are drawn upward in a sharp curve toward the centre. The figures outside of these again, Marsyas and the slim Muse at the end of the slab, both have pipes which they hold toward the centre. I will not confuse the reader by pointing out further the system of balance and symmetry in the grouping of every single slab. I am most concerned with the demonstration of the continuity and completeness of this grouping, consisting of four slabs placed side by side.

The figure at the extreme left end, then, being turned squarely toward the centre, shows the general direction of line, and the seated Muse nearest the centre, being turned toward Apollo, again draws the eye away from the physical centre toward the adjoining slab, where Apollo and Marsyas form the chief group. Thus, in the difficult task of filling one slab with three figures enacting the scene, and of placing six Muses on the one side of Apollo and only three Muses on the other side of Marsyas, while yet maintaining a symmetrical arrangement with regard to the centre on the base, the artist has succeeded well in conciliating the opposed conditions of his problem.

It is most interesting to note, furthermore, how the sculptor has used the constructive suggestions of his work of decoration to emphasize the importance of the chief figure and scene. In the case of pedimental groups, and even of a continuous architectural frieze, greater importance can be given to a figure or to a group of figures by varying the outlines of the whole composition, so that the more important figures are taller or stand higher, and there is thus a natural climax of line corresponding to the rise in interest. This pyramidal form is the ordinary canon for composition. But such a rise of line on the pedestal of a statue or group, where the chief structural aim is that of stability for the figures which it holds, would be painfully unconstructive. It would suggest in line not only that the central statue was unstable, but that the statues on either side would be in danger of falling off. Our artist has thus adopted another device. He has felt that importance is given by variation of line; but, instead of making the lines rise as they approach the centre of importance, he has produced an abrupt depression of line in the centre which, in an equally effective manner, attracts the eye to the most important figure in the whole relief, though that figure does not occupy the actual centre. Five of the Muses on the left stand erect with the line of their heads horizontal, and then there is a sudden fall of line as we near the centre in the seated Muse, which becomes still more marked when we reach Apollo, who with his large lyre immediately attracts the eye, and, by his attitude, directs us toward Marsyas. Marsyas again, by his striking action, fixes our attention and holds it; for he is the only figure who, in bold contrast to the repose of all the others, is in violent action. While his action thus readily attracts the eye to that side of the centre, the general treatment of outline-composition in the reliefs as a whole properly draws our eye to Apollo. If, as I have done, we place the three slabs together with the arrangement proposed, and a drawing of equal dimensions containing three figures, similar in attitude and grouping to those of the left end, is placed on the extreme right, and if then we stand at some distance from the relief in the actual central line between the two seated figures, there will, first, be no sense of want of symmetry in the composition as a whole; secondly, our eye will be at once attracted to Apollo as the most important figure, and from him it will naturally pass on to Marsyas.

Thus the composition in itself confirms the view, suggested to us by the evidence of similar known monuments, that these three slabs, with

another that is missing, formed part of a continuous scene which would properly decorate the base of a group of statues, and that the base of the Mantineian statues was, according to all the evidence we have of dimensions, such as would require a frieze of the size of the one consisting of four such slabs.

If now we consider the date of these reliefs as it is manifested in the treatment of the subject and in the style of the work, I can see hardly any ground for assigning it to the late Hellenistic or the Roman period.

To begin with the moulding which finishes off the relief on the top : it is of so simple a character that I should defy an archæologist to adduce reliefs of the later periods that manifest a treatment so simple. But in these matters I would not trust my own judgment, and I am happy to adduce the opinion of Mr. Schultz of the British School at Athens, who has made a careful study of Greek mouldings, and according to whom this moulding points to the fourth, and would not be out of place even in the fifth, century B. C.

As regards the composition again, it appears to me that there is a simplicity bordering almost on severity in the arrangement of the figures side by side, an absence of that restless fulness of line approaching redundancy which characterizes the relief-work of the Hellenistic and of the Roman periods. It is true that there are occasional instances of Hellenistic sarcophagi ornamented by single figures placed without any connection with one another round the four sides, as one I have recently seen which Hamdy Bey discovered at Sidon ; but these are so exceptional that they seem to me derivatives from such Hellenic works as that we are discussing. Moreover, such Hellenistic reliefs generally manifest some intrusion of an architectural nature in the relief itself, and the single figures are usually separated from one another by pillars or suggestions of niches. But, generally, where such reliefs of the later periods are not already full of lines in the violent action of the figures, trees or shrubs or other objects of landscape are introduced. For the arrangement as a whole I find the closest analogy in the relief of the pyrrhic dancers referred to above, which, as has already been stated, is a work of the fourth century B. C. It may moreover be observed that this fourth-century relief, which has a similarly simple moulding, has its figures subdivided into groups of three and four with intervening spaces, though there is no natural subdivision owing to a union of separate slabs.

If, furthermore, we take the general treatment of the subject represented, I should say that it is directly opposed to Hellenistic or Roman treatment. The flaying of Marsyas is a very favorite subject in these periods, and is commonly represented with dramatic vividness in the moment immediately preceding the barbarous punishment inflicted by Apollo upon his presumptuous rival.⁷ Marsyas is suspended by the arms, and the barbarous Scythian, of whom the famous Aretino in Florence is the type, is in the act of whetting his knife to inflict the punishment. The attendant figures, moreover, all display some intense interest in the action. In our representation, on the other hand, extreme moderation is used even at the cost of a dramatic rendering of the story. The only figure shown in action is Marsyas himself, and for him the fourth century had a prototype which belonged to the archaic period, more than a century earlier than the age of Praxiteles, namely, the Marsyas of Myron. Everywhere, in the types of the figures as well as in their general arrangement and attitudes, the idea of beauty, one might almost say comeliness, seems to have been predominant, and to have prevailed over the desire of rendering the dramatic side of the story.

The Muses moreover in their conception are, as far as we know, of the character which would best correspond to their representation in the fourth century.⁸

As is the case with all the Greek mythological types, those of the Muses were not at once fixed in the form in which we know them; nor were they ever rigidly stereotyped in the conception of one period.

At first, in the earliest times, both in literature and in art, the personalities of the Muses were not distinct and they do not differ essentially from Nymphs, Horai, Charites, etc. Nor, in traditions differing from that of the Hesiodic poems, was their number fixed to that of nine. There is evidence that the number of three was the more common number even down to the middle of the fifth century B. C. Nor were the names attributed to them, under which we know them,

⁷ Vide two sarcophagi published by TRENDLENBURG, *Annali dell' Inst.*, 1871, *tav. d' Agg. D* from Villa Pacca, Rome; the other, from the Villa Medici, *Annali, tav. d' Agg. E*; also one published by WIESELER (who mentions others in footnote, p. 122), *Annali*, 1861, a sarcophagus in cathedral of Palermo. See, also, the complete list of representations of the *Musikalischer Wettstreit des Marsyas* in OVERBECK, *Griechische Kunstmythologie*, Leipzig, 1889, III, pp. 420-82.

⁸ Mr. OSCAR BIE has summarized what is known concerning the treatment of Muses in ancient art: *Die Musen in der Antiken Kunst*, Berlin, 1887.

definitely assigned to each till a comparatively late time. Even down to the Alexandrine period, there appears to have existed considerable fluctuation in the form and attribution of such names, as well as in the assignment to the different Muses of their provinces, functions, and attributes.

At first the Muses are merely the musical companions of the gods who rejoice their hearts with song (*Iliad*, i. 603), and afterward the followers of Apollo, when, in the transformation of the personality of this deity at Delphi, the sterner python-slayer becomes the gentler leader of song and music. Song, music and the dance are their chief pursuits.

With Aristotle the subdivision and classification of the arts and sciences are first developed, and are fixed and thoroughly differentiated by his followers at Alexandria, until the departments become stereotyped. Corresponding to this process, the Muses become classified and every one of them is, as far as possible, made the personified mythical type for some branch of art or learning. This of course leads to the multiplication and specification of attributes. In the fourth century B. C. this development has not yet taken place. We find only the musical instruments, attitudes of dancing, the papyrus or scroll, and the diptych corresponding to a book. The mask for the comic muse, and the globe for Urania have not yet been introduced. The latter attribute is distinctly late.

The earliest extant work of art representing the Muses is the so-called François vase⁹ by Klitias. This vase is certainly as early as the sixth century B. C. and is thoroughly archaic in character. The Muses here accompany the gods in the procession in celebration of the marriage of Peleus and Thetis. They are nine in number, are led by Kalliope and have the well-known¹⁰ names given in the Theogony of Hesiod. But in later vases the numbers vary—in fact we hardly ever find nine Muses. Four and six seem to be the predominant numbers. Dr. Bie thinks that these vases tend to show that in the periods which they mark the Muses were still fluctuating in number.

⁹ *Arch. Zeit.*, 1873, p. 24 seq.

¹⁰ Ταῦτ' ἄρα Μοῦσαι ἄειδον Ὀλύμπια δώματ' ἔχουσαι,
ἐννέα θνηγότερες μεγάλου Διὸς ἐκγεγαυῖαι,
Κλειώ τ' Εὐτέρπη τε, θάλειά τε Μελπομένη τε,
Τερψιχόρη τ' Ἑρατώ τε, Πολύμνιά τ' Οὐρανίη τε,
Καλλιόπη θ' ἣ δὲ προφερεστάτη ἐστὶν ἀπασέων.
ἣ γὰρ καὶ βασιλεῦσιν ἄμ' αἰδοίοισιν ὀπηδεῖ (*Theogonia*, 75 seq.).

If, furthermore, we take the general treatment of the subject represented, I should say that it is directly opposed to Hellenistic or Roman treatment. The flaying of Marsyas is a very favorite subject in these periods, and is commonly represented with dramatic vividness in the moment immediately preceding the barbarous punishment inflicted by Apollo upon his presumptuous rival.⁷ Marsyas is suspended by the arms, and the barbarous Scythian, of whom the famous Aretino in Florence is the type, is in the act of whetting his knife to inflict the punishment. The attendant figures, moreover, all display some intense interest in the action. In our representation, on the other hand, extreme moderation is used even at the cost of a dramatic rendering of the story. The only figure shown in action is Marsyas himself, and for him the fourth century had a prototype which belonged to the archaic period, more than a century earlier than the age of Praxiteles, namely, the Marsyas of Myron. Everywhere, in the types of the figures as well as in their general arrangement and attitudes, the idea of beauty, one might almost say comeliness, seems to have been predominant, and to have prevailed over the desire of rendering the dramatic side of the story.

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Καλλιόπη θ' ἥ δὲ προφερεστάτη ἐστὶν ἅπασέων.

ἡ γὰρ καὶ βασιλεῦσιν ἅμ' αἰδοῖσιν ὀπηδεῖ (*Theogonia*, 75 seq.).

As I have on several previous occasions maintained, the purely decorative and tectonic considerations of vase-compositions were paramount to the vase-painter and influenced and modified even his treatment of mythological scenes and types; we may therefore go wrong if we attach too much importance to representations on vases for the detailed interpretation of mythical scenes. So in the case of the Muses, the number of figures introduced by the vase-painter was entirely determined by the number of figures his composition demanded. Among the vases I would single out for comparison several red-figured ones¹¹ which correspond in spirit to the Mantineaian reliefs and are themselves not later than the fourth century B. C. Among these, moreover, none of the later attributes, such as the mask or the globe, occur. They have the different forms of lyre, barbiton, syrinx, *etc.*, flutes, and scroll. More florid ones of a later period have more figures and fuller lines.¹²

The earliest historical artistic representations mentioned in ancient authors are the chest of Kypselos,¹³ and the altar of Hyakinthos at Amyklai.¹⁴ The sculptors who made statues of Muses in the beginning of the fifth century¹⁵ were Ageladas, Kanachos and Aristokles. These Muses had the lyre, barbiton and syrinx, the *χέλυσ*, and flutes. A Muse of Lesbos¹⁶ has the *sambyke* (a stringed instrument, probably the same as the *trigonon*). Toward the middle of the fifth century we hear of the famous group of Apollo with Leto and Artemis and the Muses¹⁷ decorating the eastern pediment of the Temple of Apollo at Delphi. This was by Praxias, the pupil of Kalamis. Dr. Bie thinks that there were probably only three Muses in this pediment. I see no reason for believing this; on the contrary, from the nature of such pedimental compositions it appears more likely that there were nine.

It is however quite certain that the group of Muses in the Helikonian sanctuary of the Muses, by Kephisodotos¹⁸ the elder, the father

¹¹ Among these a very fine Volcentian kalpis with Apollo and seven Muses, GERHARD, *Trinkschalen und Gefässe*, II. 17. It was bought from the collection of Lucien Bonaparte in 1841, and is now at Berlin. Plate 18 gives a krater (so-called oxybaphon) now at Berlin with Apollo, Terpsichore and Kleio. A fine vase with Muses and a poet (Mousaios) is published in WELCKER, *Alte Denkmäler*, III. pl. 31. This vase, also from Vulci, is now in London. A fine one with Marsyas, a Panathenaic amphora, is published in LENORMANT and DE WITTE, *Élite Céramogr.*, II. pl. 75; another, II. 79.

¹² *Élite Céramogr.*, II. pls. 70-73. Quite a florid one in Naples, *vide Arch. Zeit.*, 1869, taf. 17.

¹³ PAUS., V. 18. 4.

¹⁴ PAUS., III. 19. 5.

¹⁵ *Anthol. Gr.*, II. 15. 35; OVERBECK, *Schriftquellen*, No. 395.

¹⁶ ATHEN., IV. 182; OVERBECK, *S. Q.*, 2083.

¹⁷ PAUSANIAS, X. 19. 4; OVERBECK, *S. Q.*, 857.

of Praxiteles, consisted of nine figures, and from this time on, though single Muses were frequently represented in statues, the number of nine must certainly have been fixed as the recognized number of their full chorus. It is likely, too, that many of the later Roman statues are reproductions of the types established by Kephisodotos and his colleagues. In the case of Praxiteles, we have instances of the manner in which father and son worked on the same traditions, the Hermes with the infant Dionysos being the continuation of a type of figures introduced by Kephisodotos. It thus appears highly probable that the Mantineian relief reproduces in a modified form the Muses of Helikon. And this becomes the more likely, when we remember that these Muses on the relief have struck archæologists as being reproductions of single statues.

I will not touch here upon the Muses of Ambrakia which Dr. Bie¹⁹ has treated with great thoroughness. Of extant reliefs I would point to the circular base of a statue from Halikarnassos published by Dr. Trendelenburg.²⁰ This relief is supposed to be of the third century B. C. and at latest of the Hellenistic, not of the Roman, period. In this there is as yet no distinction between the tragic and the comic Muse, the globe does not occur, and the style is not of the late redundant form. But from the introduction of the trees and the general character of composition and execution of single figures, the work is certainly considerably later than is our Mantineian relief.

A much later work, manifesting fully the treatment as influenced by Alexandrine learning and art, is the *tabula Archelai*,²¹ the apotheosis of Homer by Archelaos of Priene which is fixed by the palaeographic character of the inscription as of the first century B. C. Here we have all the names and all the late attributes. This representation differs in character from the Mantineian reliefs almost as much as do the Roman sarcophagi referred to above.

Now, the fact that we have two standing Muses without attributes in the centre of each of the two Muse-slabs makes it almost necessary that the non-extant slab should have had a similar figure in the centre. The globe and mask could not have been massed into this one slab. A possible restoration suggests itself with one erect figure in the centre,

¹⁸ PAUSAN., IX. 30. 1; OVERBECK, *S. Q.*, 878. Three were the work of Kephisodotos, three were by Strongylion, three by Olympiosthenes.

¹⁹ *Die Musen*, pp. 24 seq.

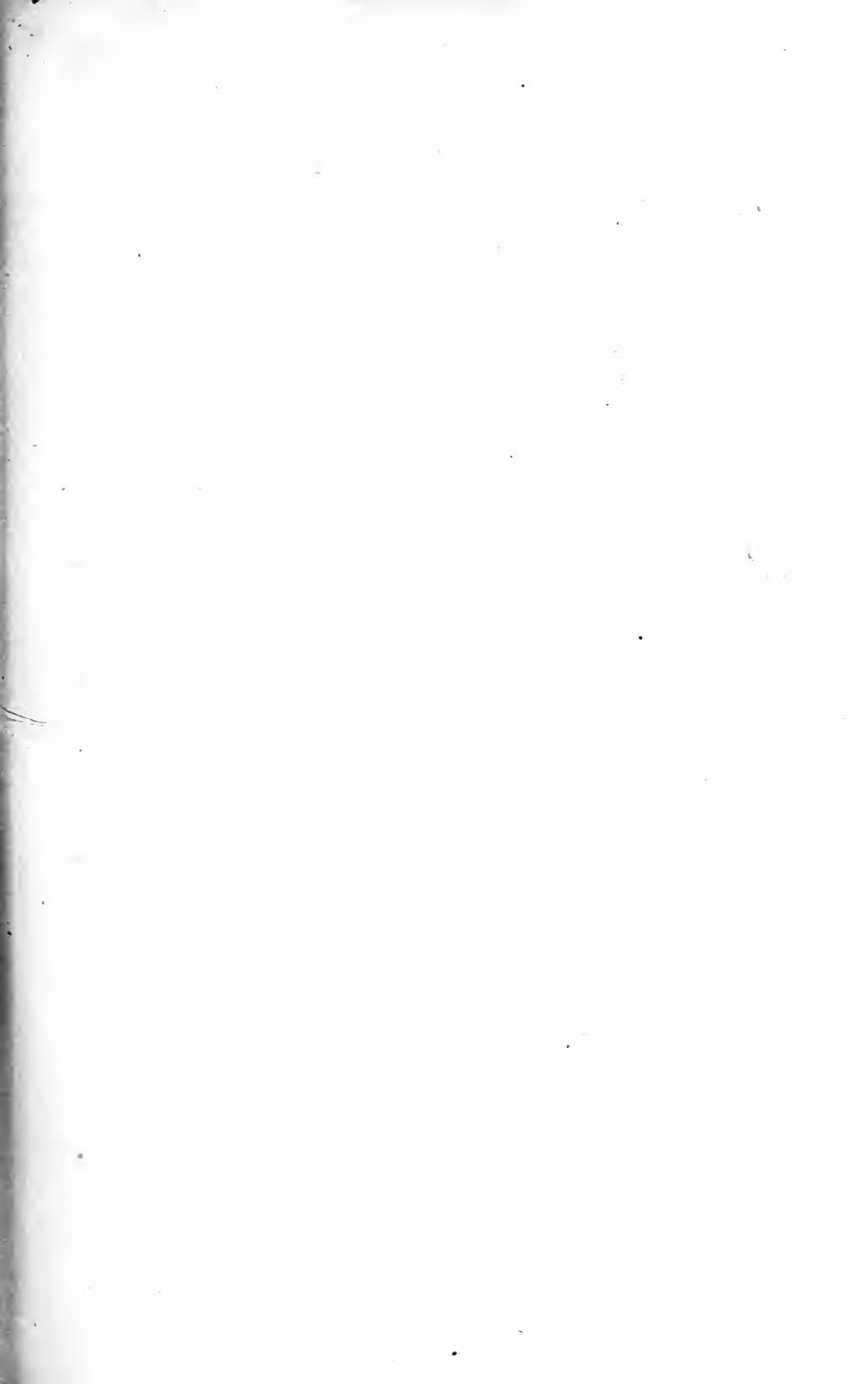
²⁰ *Winckelmann-Programm*, Berlin, 1876.

²¹ OVERBECK, *Kunstarch. Vorl.*, p. 214; KORTEGARN, *De tabula Archelai*, Bonn, 1862.

at the extreme right end a Muse holding something like the diptychon, and at the other end a Muse with a musical instrument.

At all events, from the mythological treatment of the Muses on the Mantineian relief, when viewed in the series of such representations, it appears conclusive, that, as regards the rendering of these types, they cannot be later than the fourth century and are probably of the immediate period of Praxiteles. Finally, to consider the single figures: that of Apollo, seated in dignified repose, would not only point to the fourth century but might even go back to a prototype of the fifth. It is probable that the artist exercised some restraint in this figure, which partook of a religious character. The relation of the Marsyas to the Myronian statue has already been pointed out. Moreover other instances of the adaptation of Myronian types in Praxitelean art have been dwelt on by Kekulé.²² As regards the Scythian, I have already maintained that in the treatment of this figure there is nothing pointing to the later periods. On the contrary we should contrast him with the Aretino, which typifies the treatment of a barbarian in what is probably Pergamene art. If Overbeck sees something uncommon and late in his headdress and general drapery, I would ask for instances of the treatment of such figures in the fourth century and earlier periods. The examples present to my mind are those of the Archer, probably Paris, in the eastern pediment of the Temple of Athena at Aigina, a work of the early fifth century B. C., in which this foreign warrior wears the Phrygian cap, and has the close-fitting sleeves and trousers; second, as far as we can make them out, the foreign warriors on the frieze of the Temple of Nike Apteros; third, some of the Amazons of the frieze of the Mausoleum of Halikarnassos, and for the lower part of the body the colossal horseman from Halikarnassos. If this headdress is commonly worn in later times by Paris, Amazons, Artemis, Adonis and Attis, it means that these later representations have been taken from such earlier types as the Scythian here represented. The same applies still more to the figures of Muses. If the seated Muse reminds us of some of the most graceful Tanagorean terracottas, it shows us whence the makers of these terracottas got their prototypes; for we have never assumed that the works of these minor artists were always original inspirations. Vague general analogies in the wearing of the drapery may also be found between some of these Muses and Roman draped

²² *Der Kopf des Praxitelischen Hermes*, 1881.





SEPULCHRAL RELIEFS AT ATHENS.
FOURTH CENTURY.

female figures. But as I have had occasion to set forth once before,²³ the general arrangement of the drapery of some of these statues of the Roman period was borrowed from earlier prototypes, especially of the fourth century B. C. And if we can point out analogies in the treatment of drapery and in attitudes between the Mantineian Muses and figures that are undoubtedly of the fourth century, we must, taking into account the sober and distinctly Hellenic technic of the relief-work of these slabs, assign them also to the fourth century B. C. I have little doubt in my mind, that the fact of these Muses, having superficial likeness in the arrangement of drapery to some works of the Hellenistic period existing in the Italian museums, has been the efficient cause which has led some archæologists to assign them to the later date. Now I merely ask the student to compare these Muses as regards the arrangement of drapery: first, with the colossal figure of Mausolos and of Artemisia from Halikarnassos,²⁴ undoubtedly made about the year 350 B. C. These statues appear to be the prototypes to many draped figures of the Hellenistic period. Secondly, I would compare them with the draped female figure on the drum of the column from the Temple of Artemis at Ephesos,²⁵ also a work of about the same period in the fourth century. I would further adduce the statue of the Lateran Sophokles,²⁶ probably going back to the same time. Then let us compare the drapery of the second and third Muses to our left with the drapery of the standing female figure on a beautiful large sepulchral slab in the National Museum at Athens, here published for the first time, and without doubt a work of the fourth century (PL. II, fig. 1). It will be noticed how in the arrangement of himation and chiton, how in the folding and even in such details as the cross-band of folds about the waist, and the small knot or end of drapery pulled under the end of this cross-band, the arrangement is essentially the same. Another fourth-century sepulchral relief in the same museum hitherto unpublished (PL. II, fig. 2) bears the closest analogy, in the treatment of the figure and of the drapery, to the slim Muse with the pipes. Finally if we compare this figure of the third Muse with the two central female figures on the base of the pyrrhic dancers previously referred to, we not only must be struck with the close analogy, but we should certainly be led to the opinion that these two female figures are in the

²³ *Journal of Hellenic Studies*, VII (1886), p. 247.

²⁴ Mrs. MITCHELL, p. 470, etc.; *Monumenti*, v. 18.

²⁵ RAYET, *Monuments Antiques*, II. pl. 50.

²⁶ *Monumenti dell' Inst.*, IV. 27.

treatment of the drapery and the heads slightly later modifications of the types as shown in the two Muses to which they bear analogy. But by the inscription on this base the work has been assigned to the second half of the fourth century B. C. It is thus beyond a doubt that the Muses, as here rendered, have their closest analogies in works of the age of Praxiteles, and if we add to this the general feeling in the attitude, with slight inclination of the head, of the Muse with the pipes, and consider the sentiment of all these figures, we cannot but appreciate that they are in all their characteristics expressive of Praxitelean art. By this we do not mean that these sculptures are necessarily by the hand of Praxiteles, but that they contain features which point to his influence as it has been manifested to us in the works we now assign to him.

To sum up: At Mantinea reliefs are found representing Muses grouped with Apollo and Marsyas with the pipes. These reliefs are better suited to decorate the front of the base of a large group of statues than to any other function we can think of. From what we know of the bases of such temple-statues the dimensions of four such slabs would just correspond in extent to appropriate ornament of such character. The technical and artistic treatment of the relief, the conception of the subject, the grouping of the figures, and the style and feeling of every single figure, correspond most with the art of the period of Praxiteles. We now read in Pausanias that the base of the temple-statues of Leto, Artemis and Apollo was ornamented with a representation of Marsyas with the pipes and a Muse. The conclusion seems evident. Is it probable that at Mantinea there existed another relief, not an architectural frieze, nor a balustrade, representing the same subject as that described by Pausanias, made without any relation to the same scene as represented by the great artist in the same place? It might be urged that the present reliefs are a later copy of the earlier sculptures that had been injured or destroyed. Well! a bad Roman copy it certainly is not, and we can see no reason for thus shirking the responsibility of assigning to Praxitelean art a work which we have the good fortune to possess. Such shirking reminds one of the pleasantry made by a maintainer of the personality of Homer: that the Homeric poems were not written by Homer but by another man of the same name.

CHARLES WALDSTEIN.

American School of Classical Studies at Athens,

January, 1890.

A PHœNICIAN BOWL IN THE METROPOLITAN MUSEUM.

[PLATE III.]

Of the celebrated treasures from Kourion, discovered by General L. P. di Cesnola, a silver patera with a most elaborate design has remained unpublished. It measures six inches in diameter across the top and an inch and a half in depth, and is so fractured, bent and corroded that the design can be made out with great difficulty. Wishing to feel sure whether the material were silver throughout or merely silver-lined I took the bowl to the chemical laboratory, where my friend Dr. McCay examined it and discovered that the entire bowl had been transmuted into chloride of silver. This I am told might have been caused by the action of the soil in the damp vault, in which it had been buried for so many centuries.¹ Having secured the services of a skilful draughtsman, and being present myself to supervise his work, I endeavored to obtain a reproduction of the patera, but without satisfactory result. The present drawing was secured in the following manner.

I first cleaned the bowl as carefully as possible and brought out the design by the use of white lead; then traced it in separate segments with an etching needle on a sheet of gelatine, and afterwards put these segments together. This method has the disadvantage of enlarging the outer zones, without proportionally enlarging the design. But though the figures are placed slightly too far apart, they are otherwise more accurate reproductions of the original than is likely to be obtained by free-hand drawing.

The design consists of a central medallion, around which are four concentric figured zones. The central medallion, as is frequently the case with Cypriote paterae, is occupied not with geometric but with figured decoration. Here we recognize the goddess Isis suckling Horus in the midst of lotus flowers. The composition is well known in Egyptian design and is here borrowed with slight changes in cos-

¹ CESNOLA, *Cyprus*, ch. XI.

tume, which give evidence of Assyrian influence. The lotus flowers forming almost a circle are drawn in essentially similar style to those upon Theban monuments,² but we may observe that the closed lotus buds between the open flowers have disappeared. This composition was well fitted for the central decoration of Phœnician bowls. It is found in modified form in green glazed terracotta bowls from near Idalion³ and in a silver bowl from Caere.⁴ As it filled nearly the entire space of the medallion, the *exergue* is here very small. There is no room for a separate composition as in the famous Palestrina patera, nor is the space left vacant as in the Louvre patera from Idalion,⁵ but is filled by a single line of reversed lotus flowers. It is interesting to find this composition upon a bowl from Palestrina, and to note that this is only one of a number of correspondences in design between the Palestrina and Cypriote paterae.⁶

The first or smallest zone joins the central medallion so closely as to appear to be included within it. But if we examine the design carefully we find it separated from the central composition by a double-banked lotus border of the same kind as that which separates it from the zone above. The nearest analogue we can find to this form of lotus border is that which encloses the outermost zone upon the silver patera from Amathous,⁷ where, if we may trust the drawing, it appears inverted and has lost almost every trace of its origin. Even upon this patera from Kourion it seems to have been traced with a careless hand. But its method of construction is interesting. It consists of a series of crossed lines, the upward angles of which are filled in with radiating lines surmounted by a crown of dots. It is not difficult to restore the design.



The subject within this zone is of a pastoral character. Here is a keeper with his horses: some are walking, others grazing; in one case a colt seems to startle its mother, in another the mother horse

² WILKINSON, *Anc. Egyptians*, II, figs. 361, 365, 366.

³ CESNOLA, *Cyprus*, p. 102.

⁴ PERROT and CHIPIEZ, *Hist. de l'Art*, III, fig. 553 from GRIFFI, *Cere antica*, pls. VIII, IX.

⁵ *Mus. Nap.*, III, pl. XI; PERROT and CHIPIEZ, III, fig. 546.

⁶ *Mon. ined.*, x, pl. 32.

⁷ CESNOLA, *Cyprus*, pl. XIX.

turns fondly around to its suckling colt. No portion of this subject is wholly new to us. Horses marching and horses grazing, even the cow turning to fondle its sucking calf are familiar subjects,⁸ but here they are fused into one picture, in harmony with the central theme. In the medallion it is a goddess who nourishes her son; in this picture the animal world is brought into sympathetic relation. The figured representation is also arranged with reference to the central medallion, and is broken into two segments. On one side are found the groups of horses and colts, on the other, horses in single file. The significance of this zone may be that the individual whom we call the hero of the patera was well known as the owner of many horses. The second zone is not so easily recovered. Here is represented a series of men reclining on couches, a seated woman, two attendants and a contest of a man with a lion. What the significance of this zone may be is equally puzzling. Is the seated woman, who holds a large object (pomegranate?) in her hand, a goddess? This seems hardly probable, since she occupies such an unimportant position in the picture. Nor are the men to be interpreted as gods, since this is not the Phœnician method of representing divinities. This is not therefore a Phœnician *lectisternium* in honor of the gods, but a funeral banquet in honor of a departed friend. The figure reclining with raised knee is similar in subject to the figures upon Etruscan funerary urns and upon rock-cut tombs at Myra⁹ in Lykia. The group described as a man fighting a lion is not perfectly clear in outline and if accepted as such seems to admit a disturbing element to the otherwise peaceful theme. There seems however to be little doubt that the group has been correctly described, for we find it frequently upon Phœnician gems¹⁰ and sometimes the man has the same uplifted knee.¹¹ Nor was it to the Asiatic mind out of harmony with funerary associations, for we find it carved upon a Xanthian tomb.¹² Possibly the artist, by this reference to Isdubar overcoming the lion, intended to symbolize the courage of the deceased or his escape from great danger. From a decorative point of view we may observe that the zone is not divided into two contrasting segments,

⁸ CESNOLA, *Cyprus*, p. 329 and on a scarab, *ibid.*, pl. XXVI; cf. SCHLIEMANN, *Mykenai*, fig. 175.

⁹ TEXIER, *As. Min.*, III, pls. 224, 225, 230.

¹⁰ CESNOLA, *Cyprus*, pl. XXXIV, 3, XXXVI, 3.

¹¹ MENANT, *La Glyptique Orientale*, figs. 265, 266.

¹² PERROT and CHAPIEZ, v, fig. 278.

but appears as a continuous frieze or perhaps as roughly divided into three segments, without reference to the division of the zone below it.

The design on the third zone is still more injured, but it seems to represent worship and sacrifices. In the position of honor is a man upon a couch. Behind him are two attendants with bowls. Approaching him are three similar figures and a fourth with a stag(?) over his shoulder. The lotus plants suggest a ceremonial in honor of the dead, which here consisted of offerings of wine and animal sacrifice. To the right there seems to be a man seated(?), then a man holding a bowl or patera. Before him are two lotus plants, which are not substitutes for the Tree of Life,¹³ but hold a subordinate position in the composition and are as in the preceding composition mere determinatives of funerary significance. The object of adoration is almost wholly obliterated. It was perhaps a seated figure, behind whom a worshipper appears in abject adoration. The next composition seems to consist of a reclining and a seated man facing each other before an altar. Then follow two worshippers, one in front and one behind, both adoring a seated figure. The next group is a longer one. We see here a woman seated before an altar. Behind her are two men; one bears an animal, the other holds a staff; in front are two men in adoration. Beyond them are a man dragging a refractory donkey and a man carrying a goat. If we interpret the seated figure in the preceding zone as a woman and not a goddess, the same reasons compel us to see in this individual no more important personage than the wife of the man who enjoys the position of honor. Adoration will be paid her and sacrifices offered in her behalf, even her useful donkey will be compelled to follow her: is not this the significance the artist intended to portray?

As we have interpreted this zone, no geometrical symmetry is observed in balancing the successive compositions. The two scenes in which the hero and his wife are concerned occupy more than half the zone. The remainder consists of three minor compositions, which merely echoed the same thought, or honor other members of the hero's family. The upper limit of this zone is an ornamental band, which presents the appearance of a series of quatrefoils. It was hastily engraved, the adjoining horizontal petals frequently, but not always, being united.

¹³ Cf. Phœnician ivories in LAJARD, *Monuments of Nineveh*, 1st series, pl. 88.

The fourth or outermost zone represents the hero and his wife upon a couch on wheels starting forth from the town; in front of them is an ordinary chariot, and leading the procession a mounted horseman. The object of the excursion is apparently to reach a sacred grove outside the city. Here the hero and his wife pay homage to the gods. The remainder of the zone represents the return of the same party, headed by musicians. The town is represented by three towers with intervening walls. As on the Amathous patera¹⁴ the heads above the wall indicate the population behind them. The character of the country drive is indicated by the tree outside the town. The couch upon wheels is a form of vehicle of unusual occurrence.¹⁵ It is much longer and quite different in form from the ordinary war-chariot. It would seem to have been used in the present instance as a carriage of a woman of rank, but on an Etruscan vase from Orvieto¹⁶ a man is transported upon a similar vehicle on the long journey to the lower regions. The grove here indicated was perhaps that of Apollo,¹⁷ who had several seats of worship in the neighborhood of Kourion. The trees composing the grove seem to be the date palm, which was elsewhere associated with the worship of Apollo, and as its name *φοῖνιξ* implies was especially valued in Phoenician settlements.¹⁸ The mode of representing the tree is essentially Egyptian.¹⁹ Within the grove, the hero's wife appears seated before an altar, while he is standing. The religious exercise performed, the hero and his wife return to the town. They are met and accompanied in their return by a band of musicians. The central figure carries the lyre, and we may presume from analogous representations on the archaic paterae from Idalion²⁰ and Kourion²¹ that the man in front carried a double flute and the man behind a tambourine.

Our general interpretation of this patera implies that it is a pious offering for the soul of a departed one and for his family. The design should be read in the light of Egyptian figured design and inscriptions. As the inscription upon the libation vase of Osor-ur,²² so our central medallion would address the deceased, "The Resident of the West hath established thy person among the sages of the divine lower region; he

¹⁴ CESNOLA, *Cyprus*, pl. XIX.

¹⁵ *Ibid.*, p. 247.

¹⁶ *Mon. ined.*, XI, pls. 4, 5.

¹⁷ See ENGEL, *Kypros*, II, p. 668.

¹⁸ See HEHN, *Kulturpflanzen und Haustihere*, pp. 216-228.

¹⁹ Cf. WILKINSON, *Ancient Egyptians*, I, fig. 151.

²⁰ CESNOLA, *Cyprus*, p. 77.

²¹ A. J. A., IV, pl. VII.

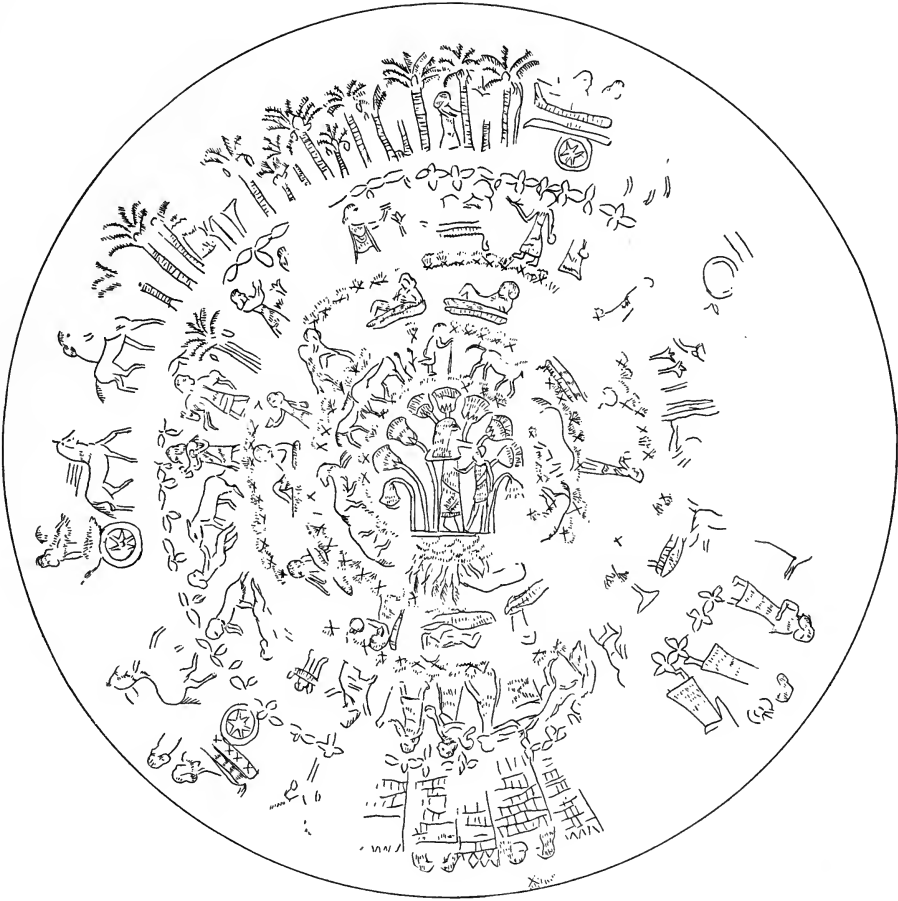
²² *Records of the Past*, vol. XII, p. 79.

giveth stability to thy body among those who repose and causeth thy soul not to distance itself from thee. Isis, divine mother, offereth thee her breast, and thou hast by her the abundance of life." The successive zones of ornament may be considered, according to Egyptian formulas, as prayers that the departed may receive all manner of good things. As upon the stele of Iritisen²³ we read an inscribed prayer to Osiris that he may give a "funereal meal of bread and liquor, thousands of loaves, liquors, oxen, geese, all good and pure things, to the pious Iritisen and to his pious wife Hapu, who loves him," so here we read similar prayers for the hero and his wife. And upon the final zone we seem to read praises of the piety of the hero similar to the inscription of Iritisen, "I know the mystery of the divine Word, the ordinances of the religious feasts, every rite of which they are fraught, I never strayed from them."

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²³ *Records of the Past*, vol. x, p. 3.



PHœNICIAN BOWL IN THE METROPOLITAN MUSEUM, NEW YORK.

THE HOUSE OF THE MARTYRS JOHN AND PAUL
RECENTLY DISCOVERED ON THE COELIAN
HILL AT ROME.*

[PLATES IV, V, VI.]

VI. SECONDARY PARTS OF THE HOUSE.

With the exception of the *tablinum*, which from its position and shape can easily be recognized in any Roman house, it is somewhat difficult to ascertain the use of the various chambers that have been excavated. In general, three groups have been distinguished: the family apartments, the chambers or sleeping-rooms of the servants, and the cells for domestic purposes. These three classes are easily to be recognized in this house, but it would not be possible, without indulging in useless conjectures, to attempt a detailed specification in each one. To the first class belong the eight large rooms behind the peristyle; to the second, several rooms on the lower floor near the *atria* and many of those on the two stories above.

The luxurious life of the great families in Rome required nothing less than an army of slaves. The *interni* who worked within the house, and the *externi* who worked without; the *ordinarii* who exercised the office of superintendence, and the *vulgares* whose offices were the most menial,¹ such as the *ostiarius*,² the *cubicularius*,³ the *structor*,⁴ the *lecticarius*,⁵ the *focarius*,⁶ the *pincerna*,⁷ the *promus*,⁸ and a hundred others.⁹ All these were lodged within the palace. The wealthy learned, from Christian charity, to moderate the abuses of the system: still, they retained a large body of slaves. This fact alone can explain the size of the apartments for the domestics placed on all three of the stories in the house of the Coelian. Such are, on the lower story, sundry chambers near the *atrium* and the crypts, several of which I have explored

* Continued from Vol. VI, page 285.

¹ ULPIANUS, *Digest.* XLVII. 10, 15 r; *ibid.*, 14, 4, 5.

² PETRONIUS, *Satir.*, 29.

³ CICERO, *Verr.* II., 3, 4.

⁴ PETRONIUS, *op. cit.*, 35.

⁵ CICERO, *Epist. fam.*, IV. 12.

⁶ ULPIANUS, *op. cit.*, IV. 9, 1.

⁷ ASCONIUS, *In Verr.* II., 1, 26.

⁸ PLAUTUS, *Pseud.*, II., 2, 14 (608).

⁹ COLUMELLA, I. 9. 3; II. 13. 17.

but not cleared. Their height, as in general that of all the cells on the east side, being much less than elsewhere, the floor above them was not entirely destroyed when the basilica was erected. Over a space corresponding to one quarter of the area of the basilica toward the porch, a suite of chambers of various forms and sizes remain on this floor; but all are rude and plain, so that I have not been tempted to clear them. If I am not mistaken, this was the main portion of the apartment of the slaves, which, Cicero informs us (*Phil.* II., 27), consisted of many small cells placed in a row and called more properly *dormitoria*.

. Nothing can be said of the stories that rose above the *parte nobile* or aristocratic section of the lower story, as they have been completely destroyed with the sole exception of the façade including the windows.

I shall pass to a description of the crypts and cells already mentioned, such as formed an important part of the Roman houses. The crypts were long and narrow galleries on the lower floor, closed on both sides and built either on the edge of a garden or along the wings of a portico or around any other part of the building. They served for pleasant strolls and meetings under cover in the warm hours of the day,¹⁰ or for the storing of grains, fruits, and other articles that needed protection from atmospheric changes.¹¹ When these galleries are annexed to an *atrium* or peristyle, they are termed *cryptoporticus*: such a one is placed in our house on the side of the inner court that is in front of the *tablinum* and its neighboring rooms. For us, this is the most venerated part of the building, because here the two saintly owners were killed for the faith and buried by the soldiers of Terentianus. The half of its length which has been hitherto explored measures ten metres; and its width is about one metre and a half, at least from the *tablinum* onward, where the main staircase of the house is placed. The floor of this crypt, which is paved with polygons of lava, is on a somewhat lower level, as already noted. Its rude vault is a tunnel-vault modified by some lunettes. It is divided into two compartments through the construction of the staircase within it. At right angles to this runs a second crypt of equal width and at least nine metres long: both are without windows and were lighted by some doors which opened, apparently, upon the court.

¹⁰ MURATORI, *Inscript.*, p. 481; REINESIUS, *Syntagm. Inscript.*, II. 28; SPARTIANUS, *Hadr.* 10.

¹¹ VITRUVIUS, VI. 5. 2; VARRO, *De re Rust.*, I. 57.

Through other passages, access was had to various contiguous cells whose use should be here explained.

The *cella* of a Roman house, speaking generally, is a storeroom for oil, wine, and such things: hence the epithets *olearia*, *vinaria*, etc.¹² These liquids were kept in vases usually of earthenware (*dolia*, *amphorae*, *seriae*), which were placed in rows against the walls or stuck in a bed of sand.¹³ As such a method of keeping wine required a great amount of room and consequently many *cellae*, in the house of SS. John and Paul an entire wing on the ground-floor to the east is occupied by these cellars. They are at present reached from the point where the two described above meet, and they extend on every side in a network of small unadorned chambers communicating by vaulted passages of varying forms and sizes. None of them are paved, the floor being covered with a layer of sand, *doliis defossis*. In one of them is a square well with its parapet, or *puteal*, nearly as high as the vault, with the usual holes in the inner walls for the purpose of descending to draw water. It became necessary to raise the parapet to this height by means of an additional section, at the time that the level of the floor was raised by the bed of sand in order to turn it into a cellar. The vault of this room is quite black with smoke. The hearth or *focus* (Cic., *De Sen.*, 16) was here found, in pieces, under the rubbish, and it still contained the charcoal reduced to powder. On one of the walls is a pipe for hot water; that is, a large terracotta pipe placed within a rectangular shaft left in the wall, the pipe reappearing in the upper story on the opposite side of the wall. A similar conduit was found in the thickness of the vault of the neighboring cellar, but it had been deemed necessary to close it for reasons of solidity. A third conduit exists in the following chamber. High on the wall, opposite the door of the first of these chambers, is a small stone reservoir encased in the wall, from which it is separated by plates of lead to keep the dampness from the walls. This basin has a mouth for discharging the water. Here and on the floor above may have been the *torcularium*¹⁴ for pressing the grapes, unless it be preferable to regard this whole region as serving in the beginning for bathing purposes, before it was turned into cellars. This cannot be determined until all

¹² VARRO, *De re Rust.*, I. 10, 13; I. 11, 12; COLUMELLA, XII. 18, 3, 4; I. 6, 9; CICERO, *De Senect.*, 16.

¹³ PLINIUS, *Hist. Nat.*, XIV. 27; COLUMELLA, XII. 18. 5.

¹⁴ COLUMELLA, XII. 18. 3; VITRUVIUS, VI. 6. 3.

the surrounding chambers are cleared on both stories. In a fourth room, the entire space between the two walls is occupied by another reservoir, made of bricks and cement, which rises thirty centimetres above the floor level and is coated, on the inside, with a good plastering of ground potsherds. In this room I have stuck in the sand-bed some of the many *amphorae* found in the whole row of cellars in order to give an example of the arrangement of a Roman wine-cellar. In 1789, there was found under the walls of Rome one of these wine-cellar divided into three compartments whose plan and description are given in Rich's Dictionary (art. *cella*). In many ways, this cellar on the Coelian resembles it, as it does those that are being excavated at Pompeii. At the entrance to the same chamber was found a *dolium* walled with mortar into an angle of the wall, but with its upper part broken off. These few words are all that can be said, as the excavation of this part is hardly begun.

In the same zone of cellars, toward the inner court, there opens a passage 90 cent. wide and about two metres long which leads, by a staircase that is not yet cleared, to a lower story. This is composed of a long series of very small chambers, some of which extend under the floor of the peristyle. Taken in relation to the interior of the house, they are subterranean, but they are not so where they are connected with the exterior, on the opposite side, where the hill falls off very rapidly toward the street. Only two or three have been cleared near the graves in the new chapel of S. Paolo della Croce, which were, indeed, rooms on the same story. The first is a sort of narrow vestibule, with a tunnel-vault, whence some light was introduced, through two windows, into a spacious square hall with a hemicycle in the end wall. Its vault is a *vela*: that of the hemicycle is a semi-dome. In the opposite wall is a large arched opening similar to that of the apse, which communicates by means of a long narrow passage with the neighboring rooms, whose number I have not yet been able to determine.

Here was the *balineum* of the house, as that part of the large Roman house was termed which served for baths.¹⁵ Such private bathing establishments could be indulged in only by the wealthiest families. They had the same general divisions and arrangements as the public baths: the *apodyterium*, for undressing and dressing; the *frigidarium* or *baptisterium*, for cold baths; the *calidarium*, for hot baths; the *tepidarium*,

¹⁵ VARRO, *Ling. lat.*, IX. 68.

for resting in a moderate temperature after the bath ; the *hypocaustis* or subterranean furnace, from which pipes of metal or terracotta carried the hot water through the establishment. At the end of this room was a semicircular alcove named *laconicum*, which contained a reservoir for the warm bath called *alveus* or an isolated basin, *solium* or *labrum* for sprinkling.

The thermal hall had the pavement commonly called *suspensura*,¹⁶ so named because it is raised from the ground on parallel rows of piers, two feet high, made of square bricks cemented with clay mixed with chopped hair. On these piers there rested terracotta slabs covered with a layer of *astraco*, above which were slabs of white marble decorated with mosaic. The empty space below formed the *hypocaustis* or *fornax*, the furnace already mentioned.

Such is the arrangement in the rooms of our Coelian house. The hemicycle of the *laconicum* is opened in the left-hand wall, and is of the same size as the *alveus* or bathing-tub it contains, which is in the form of a segment of a circle with a uniform depth of seventy centimetres. On one side was a small marble projection or *gradus* which served as a seat. On the right wall there is the mouth of a terracotta circular pipe with a diameter of fifteen centimetres. A parapet rising one metre from the pavement hides the bathing-place, leaving only a narrow passage descending to it. This parapet is called by Vitruvius the *pluteus*. The interior of both *alveus* and *laconicum* was lined with marble slabs, as can be seen from the impressions on the mortar.

Only a part of the raised pavement of the thermal hall has been preserved, and this is covered with very fine white and black mosaic. In the destroyed section some of the supporting piers remain : they are sixty centimeters high ; the slabs they support are five cent. thick ; the *astraco* on top of them, in which the mosaic is set, twenty cent. thick. The interior of the *hypocaustis* is entirely covered with slabs of terracotta, still black with smoke. I have not been able to find the *prae-furnium* or mouth of the furnace whence the flames passed to pervade the sub-pavement already mentioned. The heated air passed through a terracotta pipe twenty cent. in diameter, still black with smoke : traces of it remain in one of the four corners of the hall by the wall. The pipes that carried the hot air about the hall to raise its temperature have been so displaced that their arrangement is uncertain. All of the many found here were of the usual rectangular form and thirty-six

¹⁶ VITRUVIUS, v. 10 ; PALLADIO, i. 40.

centimetres long. The *labrum*, opposite the *laconicum*, is a heavy circular terracotta basin over a metre in diameter.

The walls, vaults, and arches of all the above rooms and of those near them, which I explored but did not clear, are covered with good stucco partly fallen. No traces of paintings are visible upon any of them. The simplicity of these bathing-apartments, so different from the luxuriousness of many others, may be owing to the fact that the owners were Christians. Their present obscurity, however, is caused by the construction of the basilica whose wall cut off all communication with the exterior. Besides, there are remains of other baths of greater importance. At a short distance from those just described and on the same floor, at the point where fifty years ago the new sacristy of the basilica was built, a large thermal hall was discovered but covered in again. From contemporary descriptions, this would seem to have resembled in form and structure the finest Pompeian *hypocausta*. Its raised pavements was covered, not with mosaic but with thin slabs of white marble, while the *hypocaustis* beneath had a mosaic floor. There were marble incrustations and other rich decorations upon the walls of the main hall: these were admired at the time of the discovery though injured by the water that stood over the great part of the surface. Other neighboring halls decorated with mosaics and paintings were hardly seen, and they suffered the same fate, being first injured and then buried. I cannot determine whether this more splendid *balineum* was built when the simpler one was abandoned, or whether the two were contemporary. On the plan it has been possible to note only the first, as the second could not be examined or measured.

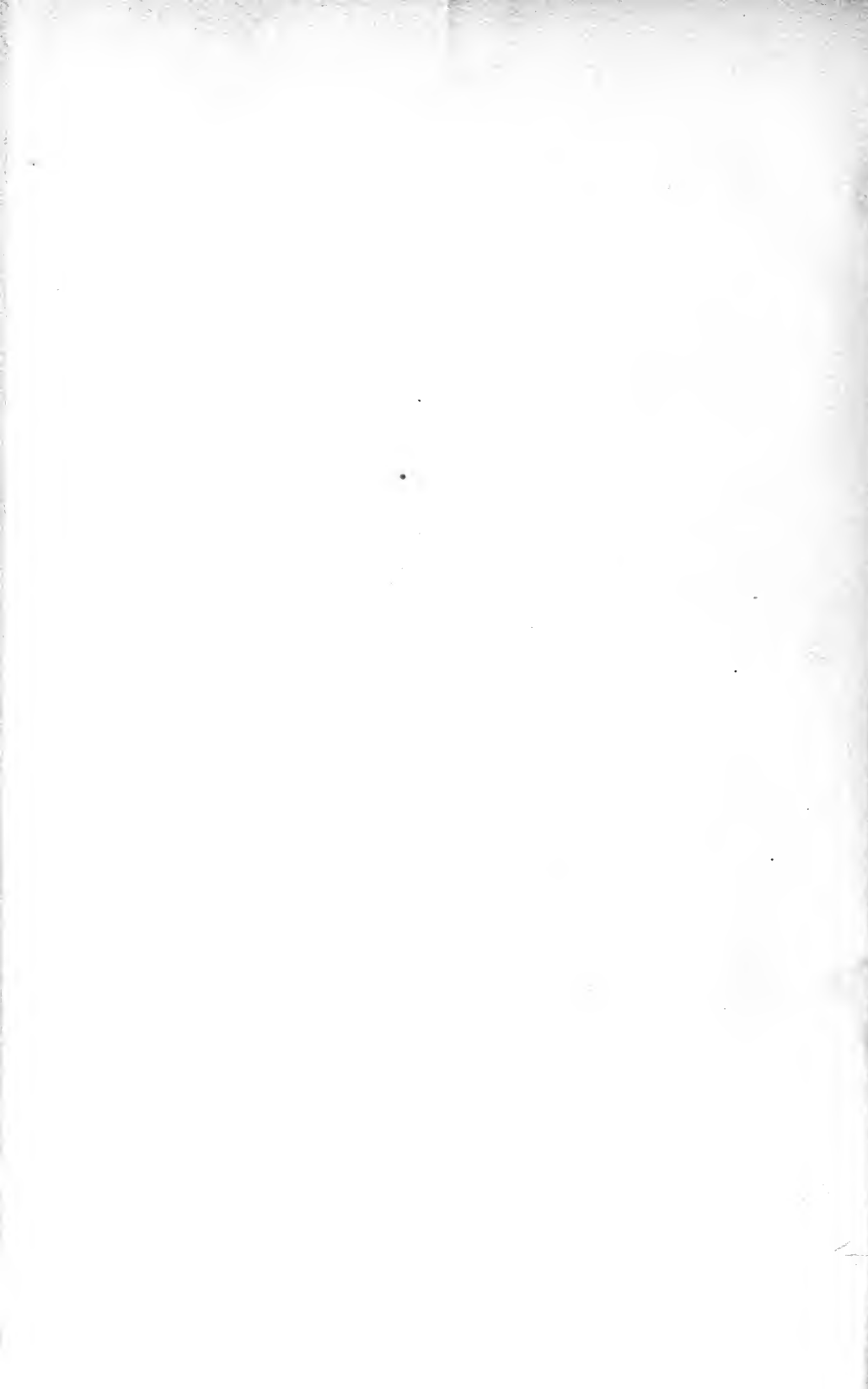
Another distinct part of the Roman house was often the *oecus*, a hall or a court closed and usually entirely covered by a roof or ceiling, which served as a place of recreation, for receptions, and for banquets. Its size, form, and situation distinguish it readily from all other parts of the house. Such a hall seems to have existed in this house, at least up to the fourth century. It is a spacious hall at present outside the perimeter of the basilica, though a part of it is underneath its apse. It is ten metres wide and of a length equal to the side of the house on the *Olivus Scauri* at the peristyle. Its construction is of a different period from that of the neighboring rooms. It appears to me to be much earlier, to judge by the quality of the *cortina* of inner walls, which is of excellent reticulated work. Next to it the later chambers were added, an interval of about a

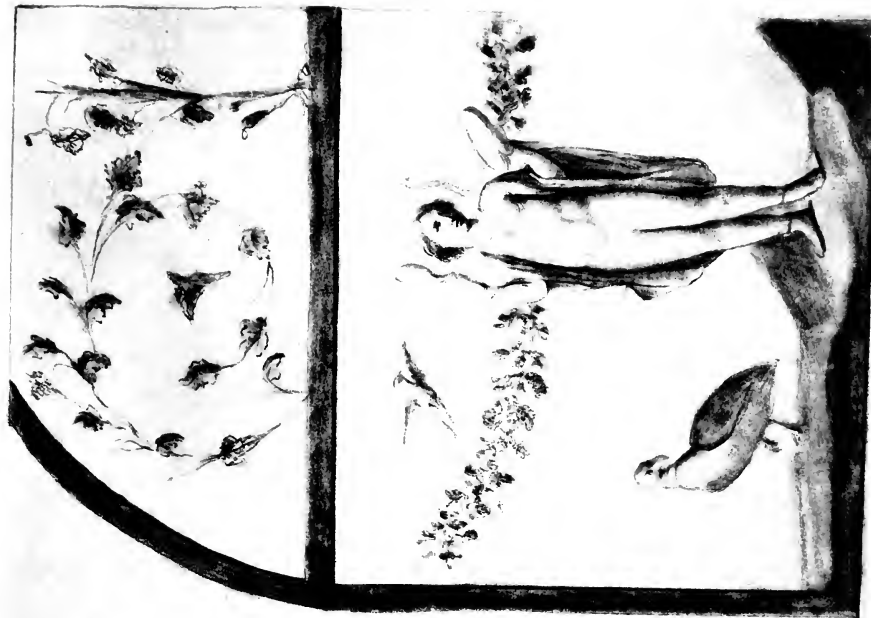
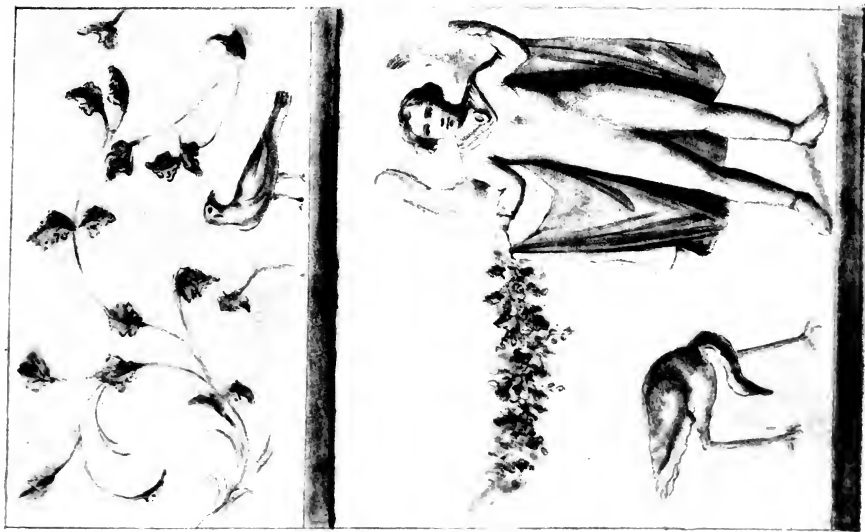
centimetre being left between the walls. At no point did I find any indications of vaults, which would certainly have been visible as the wall still rises about six metres from the pavement. Hence it is to be inferred that the covering was either a gable-roof or a ceiling with a loggia above it: this is made probable by the traces, at that point, of remains of windows opening on to the street, though the part of the old wall that faced this street is now in great part destroyed. Here was probably one of those terraces called *solaria*, a fine example of which was found in a house at Herculaneum. The *oecus* must have been entered on the side of the peristyle as there is no door leading into the apartments. The many fragments of marble slabs, bases of columns, carvings, and bas-reliefs, painted stuccoes which I found here prove the original splendor of this hall. It could have been more completely reconstructed had not the constructions of the basilica extended into it. That this ceased to be the *oecus* of the house in about the fourth century is shown by three transversal walls then constructed, of which only that portion remains which is within the perimeter of the basilica. Their construction in *tufa* with occasional courses of brick, and their discord with the plan of the building, show them to be the work of a late period.

VII. THE PAINTINGS.

All the walls and vaults of the *appartamento nobile*, the rooms, passageways, and the wings of the *atrium* were covered with paintings. Like the walls, these paintings are of various dates, some belonging to the third or even second century, while others date from the fourth, or from both periods through restorations. Eleven only of the rooms hitherto discovered have preserved to a greater or lesser degree their stucco and paintings. The earliest and artistically the most important are those in a room placed under the high altar of the basilica. The lower part of its four walls was covered, up to a height of two metres, with slabs of white marble, traces of which still remain. The entire surface above this is decorated with encaustic paintings of great richness and beauty. On a white background and standing on a green-sward are life-size genii, placed at regular intervals in front view (PLS. IV-VI). They are not entirely nude, as was the custom in pagan Roman art, though they might be so considered from a casual glance; but they wear a close-fitting seamless garment which would be invisible were not its edges apparent at the neck, the wrists, and

the feet. The arms are gracefully extended and bent as if in rhythmic dance, and with both hands they hold up the *chlamys juvenilis* that hangs quite open behind them from shoulder to knee. Behind these figures is a rich wreath of many-colored flowers, forming a festoon between each figure, and extending around the entire room after the fashion of the so-called *έρκαρπα*. There are ten genii, four on each of the side-walls and two beside the door leading into the adjoining room: the two that were opposite them on the other wall are now hidden behind the main wall of the basilica which here interposes. At the feet of the genii, among trees and flowering plants, are various kinds of large birds of brilliant hues—peacocks, ducks, ostriches—while others are flying through the air. Such representations of genii of both sexes with flowers and birds are frequent in Roman paintings, but I am not aware of any like this, in which the figures are life-size and form the entire decoration of the walls. The vault of this room is painted in similar style. A dark band, ten centimetres wide, separates its decoration from that of the walls. The scene is the gathering of the grapes by small genii holding baskets in their hands or under their arms and running from vine to vine gathering the grapes with a charming vivacity of motion and of pose, while birds flit among the dense foliage. A similar scene is painted in a well-known ceiling of the catacomb of Domitilla, dating from about the same time and differing only in greater accuracy of design and better preservation. For, in this vault of the Coelian house, the artist has aimed more at general effect than at delicacy of details, and the entire upper part of the subject has perished through the falling of the plaster from the ruined vault; but from the remaining fragments it is evident that the scene was there continued in the same manner as in the catacomb of Domitilla. I have termed the figures genii to distinguish these tutelary angels of men from those that guarded the female sex, called *junones*: but they may be more reasonably considered as *erotes*. Their presence in a Christian house is easily explained. They are more than a century earlier than the Christian owners, who, when they came into possession, saw no reason to efface them. Comm. De Rossi has called renewed attention, in connection with this special instance, to the fact that, up to the time of Constantine, the Christian artists, brought up in the classic school, preserved, quite frankly, its entire system of decoration, varying it to suit their taste. Whatever original position such figures as these may have held in classic mythology, their religious significance had







been quite lost in their decorative use. Tertullian himself, notwithstanding his Montanistic severity, distinguished between the images prohibited by the Mosaic law, *idolatriæ causa*, and those to which either *idolatriæ titulum non pertinebat* or else were *simplex ornamentum*.¹⁷ This is confirmed in the recently discovered Arabic version of the Apostolic Constitutions published under the name of Hippolytus. In Canon XI reference is made to Christian architects, sculptors, and painters of secular works. Excommunication is launched against all who execute idolatrous figures, while they are allowed to exercise their art in matters that pertain to common life: *si quis artifex eiusmodi rem (idolum vel aliquam figuram idolatricam) confecerit, exceptis iis rebus, quæ ad usum hominum pertinent, excommunicetur donec pœnitentiam agat*.¹⁸ In what precise manner this distinction was understood and carried out, during the third and fourth centuries, is shown by the *Acts of the SS. Quattro Coronati*, a document whose importance is recognized by the best critics.¹⁹ These four artists, who were secretly Christians, executed at gentile request some *conchas sigillis ornatas* with images of Victory and of Cupid and even with a *simulacrum solis cum quadriga*. But, on being requested to execute an Asclepius, they obstinately refused—*Asclepii simulacrum non fecerunt*—and this refusal was the cause of their death.²⁰ In a similar way can we explain the many mythological scenes that are seen at every step in the Christian catacombs, and at first excite astonishment.²¹ Just as these four Christian sculptors were willing to carve Victories and Cupids on fountains, and as so many other Christians could without scruple have in their houses, for purely decorative purposes, objects decorated with pagan figures, so also could the saints John and Paul find no objection to the *erotes* decorating one of the rooms of their paternal home.

Adjoining the room just described are two others to which belongs the second of the six doors on the *Clivus Scauri*, ascending the hill. Their paintings are in a different style. In the first, the stucco on the walls had fallen at an early period and was replaced at the time

¹⁷ TERTULLIANUS, *Advers. Marcion.*, II. 22; DE ROSSI, *Roma sott.*, II, 351.

¹⁸ HAMBERG, *Canones S. Hippolyti arabici*, p. 69; DE ROSSI, *op. cit.*, III, 538.

¹⁹ WATTENBACH, *Untersuchungen zur Röm. Kaisergeschichte*, III, 324; DE ROSSI, *Bullettino*, 1879, pp. 45-79.

²⁰ *Mittheil. der central. Comm.*, Wien, 1872, p. XLVIII; DE ROSSI, *loc. cit.*

²¹ E. Q. VISCONTI, *Opere Varie*, I, 216; GARRUCCI, *Vetri*, tav. XXXV. 1, 8. ed. 2; DE ROSSI, *op. cit.*, *Bullettino*, *loc. cit.*; RICHEMONT DES BASSAYES, *Nouvelles études sur les Catacombes romaines*, Paris, 1870, p. 446.

of the saintly owners by another of inferior quality, which remained unpainted. The ancient painting of the vault was still intact at the time of the ruin of the house: but it now remains only in one corner of the room. The decoration consists of panels of imitation yellow marble encircled with red bands: the same design recurs at the end in the semicircular space formed by the vault; so that it would appear as if the entire room were decorated in this manner. A brick bench, raised against one of the walls before they were covered with the new stucco, has been the means of preserving a part of the ancient decoration, which is here of imitation red marble. The bench may have served as a *lectulus* or a reading and writing bench. It was destroyed by the workmen before I could save it. The room which follows, on the same axis, has a painted decoration which is still preserved on three sides. Its paintings belong to two periods, the third and the fourth centuries. The former occupy the upper part along a width of one metre and a half, the latter are below them. It would be more exact to say that these lower paintings are a restoration, as they are superposed over earlier ones that have not been effaced but only covered up with tempera colors. This may have been done with a purpose and not because the earlier fresco was injured, for that part of it which still remains is in good condition. In the judgment of Comm. De Rossi, it is probable that the reason for hiding them was that the scenes represented were too free or too pagan. That these scenes contained figures is made evident by the part of them which was not covered: besides, in certain lights, it is possible to obtain glimpses here and there of images which the second coat of coloring did not wholly hide. Of these frescoes, the frieze that encircled the room under the vault still exists in part, as well as part of the decoration of the lunette, which contains panels in white with red and black bands and frame, and, in the centre, a bunch of flowers and some figures which faded away during the excavation as the stucco beneath had been strongly affected by nitre. Where the frieze is untouched, it consists of large volutes and acanthus leaves, and in the parts restored in the fourth century are fishes and birds in the midst of a commonplace wreath of leaves. In the latter design the different style and coloring and the excessive rudeness, and the presence of fresco-work underneath are sufficient to prove that this is the work of a later hand. This is still more evident in the lower part of the decoration, two metres in height, which consists of the façade of a

building to which are adapted, with bad taste, certain geometric figures surrounded by many-colored bands or by imitation yellow marble. The backgrounds are either of pale white, or of red, which is the prevailing color in the entire decoration. The wretched technique of all these colors of the second coat is such that from day to day they are becoming ruined. When discovered they were fresh and clear, but after the earth which protected them had been removed the salt nitrates began to alter them to such a degree that but little is now visible.

Far more important are the paintings of the *tablinum*, which, in a Roman house, always received the richest decoration. Of all the rooms thus far discovered in this house it is the only one that preserves its frescoes on all four walls and on the vault, and, what is still better, preserves them in good condition. This is owing partly to the excellence of the materials, partly to the careful execution in fresco without any use of wax. Below are some architectural façades, as in the preceding room, which being far inferior may have been copied from these in the *tablinum*. For here the lines are more regular, the drawing more accurate, the colors—red, yellow, green and violet—are in better taste and arrangement. The imaginary building is crowned by small gables placed within a band which imitates the *opus isodomum*, made of cubes of yellow marble with red veinings. Above this band, which encircles the entire room, is a frieze of such richness, beauty, and grace as to place it on an equality with the best Pompeian decoration. It is made of the Corinthian acanthus, which starting from a heavily tufted plant placed in the centre, spreads luxuriantly in full volutes on either side until it reaches the next wall, upon which a corresponding decoration has been carried out. Its dark green color stands out strongly on a white ground which contrasts well with the yellow of the lower band and the red of the cornice. Above the frieze is another continuous line of decoration underneath the tunnel-vault. Its execution is so good and full of life that, were it not in fresco and on the same stucco, we should be tempted to believe it earlier by a century than the rest. At all events, it is by another hand than that which decorated the walls; by the hand of an artist accustomed to design figures, not an artisan confined to tracing outlines and coloring grounds. It is all the more unfortunate that here, as in the three preceding rooms, the upper part of the vault is destroyed, so that of this fine painting only the lower edges remain

to a height of about a metre and a half. The design is a broad ellipse with a white ground edged by six concentric bands—red, yellow, green, and blue. Similar but narrower bands radiating from the centre to the circumference divide this field into eight triangular compartments, which give to the entire composition the aspect of a wheel. These compartments are filled with figures of Christian art of rare interest, which will be described in the next chapter. The space that remains between the edge of the ellipse and the frieze on the walls is also subdivided by similar bands into compartments which contain not figures but rich foliage on a white ground, except that at the four corners there are scenic masks similar to those so often found in ancient and even early-Christian decoration. In a lunette of the vault are hippocamps hanging like lamps from a chain. This fabulous animal, half-fish, half-horse, destined to draw the car of Neptune and the Tritons, is a frequent decorative motive, sometimes in the Catacombs.

Next to the *tablinum* is, on one side, the *cryptoporticus* of the *atrium*, and, on the other, a small chamber or rather passage that leads to the secondary vestibule of the house along the side of the *Clivus Scauri*. Both have good paintings. Those of the passageway reproduce marbles of pale yellow with red veinings divided into regular compartments by red bands which imitate the outlines of squared building blocks. The adjoining passage, which leads into the other row of rooms is painted in the same manner. The vault, which in these narrow passageways is much higher than elsewhere has been almost entirely destroyed. Only a strip about one metre high remains containing small figures of animals or of winged genii or *junones* bearing wreaths of flowers. The wing of the *atrium* or peristyle, in so far as it has been uncovered, along a length of several metres has two different styles of decoration. On the right of the main door of the *tablinum* where the staircase is which leads to the floor above, is painted a *viridarium* enclosed by a cane railing over which there climb plants with leaves and flowers. The workmanship is somewhat rude and the tempera colors have become so pale that the design is hardly perceptible. The border (*zoccolo*), on the contrary, which rises a metre from the line of steps, is frescoed in red, and is of fine stucco that shines like marble. The paintings on the right of the door consist of the usual geometric patterns on backgrounds of varied colors, framed with good taste. They rise to a height of four metres, and their colors are applied in encaustic over others of an earlier date that

were in fresco, in the same way as was done in another room, mentioned above. In scraping these more recent colors, was discovered an unusual subject, which will be described in the next chapter.

The three rooms that were formed within the *oecus* of the house were also painted, but the work undertaken at this point in the fifth century in order to construct the apse of the basilica led to their destruction. Some wide strips remain at two points. In the middle room are some large frames of good style in which red predominates : above are traces of compositions with figurines in the centre and nothing more. In the next room, which is not yet accessible, are the usual imitation marbles divided into rectangles by red lines to imitate squared building-blocks. The execution is far superior to that of all the other rooms in which a similar style of decoration was used. I have already mentioned still another large room, which in the course of time came to be used as a wine-vault. Its tunnel vault is entirely painted, but the colors are so faded and ruined that it is only by moistening them that a faint idea of their design can be ascertained. Delicate and brilliantly colored lines divided the vault into compartments of various sizes and shapes upon whose white background were painted decorations and flowers.

Another small room in the vestibule that opens on the *Clivus Scauri* was transformed in the Middle Ages into an oratory and adorned with paintings which will be described later. On this occasion, all the old painted stucco of the walls was not destroyed, but was left under the new coat wherever it did not interfere with the restoration. In the little that remains there appears the same brilliant red used on the border of the staircase, just described : the *cryptoporticus*, also, has a similar border surrounding it at quite a distance from the ground.

PADRE GERMANO DI S. STANISLAO, PASSIONISTA.

Convent of SS. Giovanni e Paolo.

Roma,
July, 1890.

[TO BE CONTINUED.]

NOTES ON ROMAN ARTISTS OF THE MIDDLE AGES.

III. TWO TOMBS OF THE POPES AT VITERBO BY VAS- SALLECTUS AND PETRUS ODERISI.*

[PLATES VII, VIII, IX.]

The tombs of the Popes that remain from the Middle Ages in fair preservation are few. Two such monuments, not hitherto carefully described or illustrated, exist in the church of San Francesco at Viterbo:¹ they are the tombs of Hadrian V and Clement IV, the former intact, the latter partly ruined; both dating from the XIII century.

I. TOMB OF HADRIAN V (PL. VII).

At the time of my first visit to Viterbo, in June 1887, the monument of Hadrian V had been undergoing a considerable repair under the supervision of Professor Giuseppe Rossi. The church in which it stands was originally called Sant' Angelo in Castello and was consecrated in 1160 by Alexander III. It was given in 1237 to the Minorites, who rebuilt the church, calling it San Francesco. The building has been almost completely restored, and only the choir and transept remain in the Gothic style of that period. When intact, it must have been a fine example of early Italian Gothic, built shortly after the parent church at Assisi. In the left wall of the choir is the tomb of Cardinal Marco da Viterbo (d. 1369), a superb piece of sculpture of the close of the XIV century. It bears the inscription: FRATER JVLIANVS FECIT FIERI HOC OPVS. This Julianus was General of the

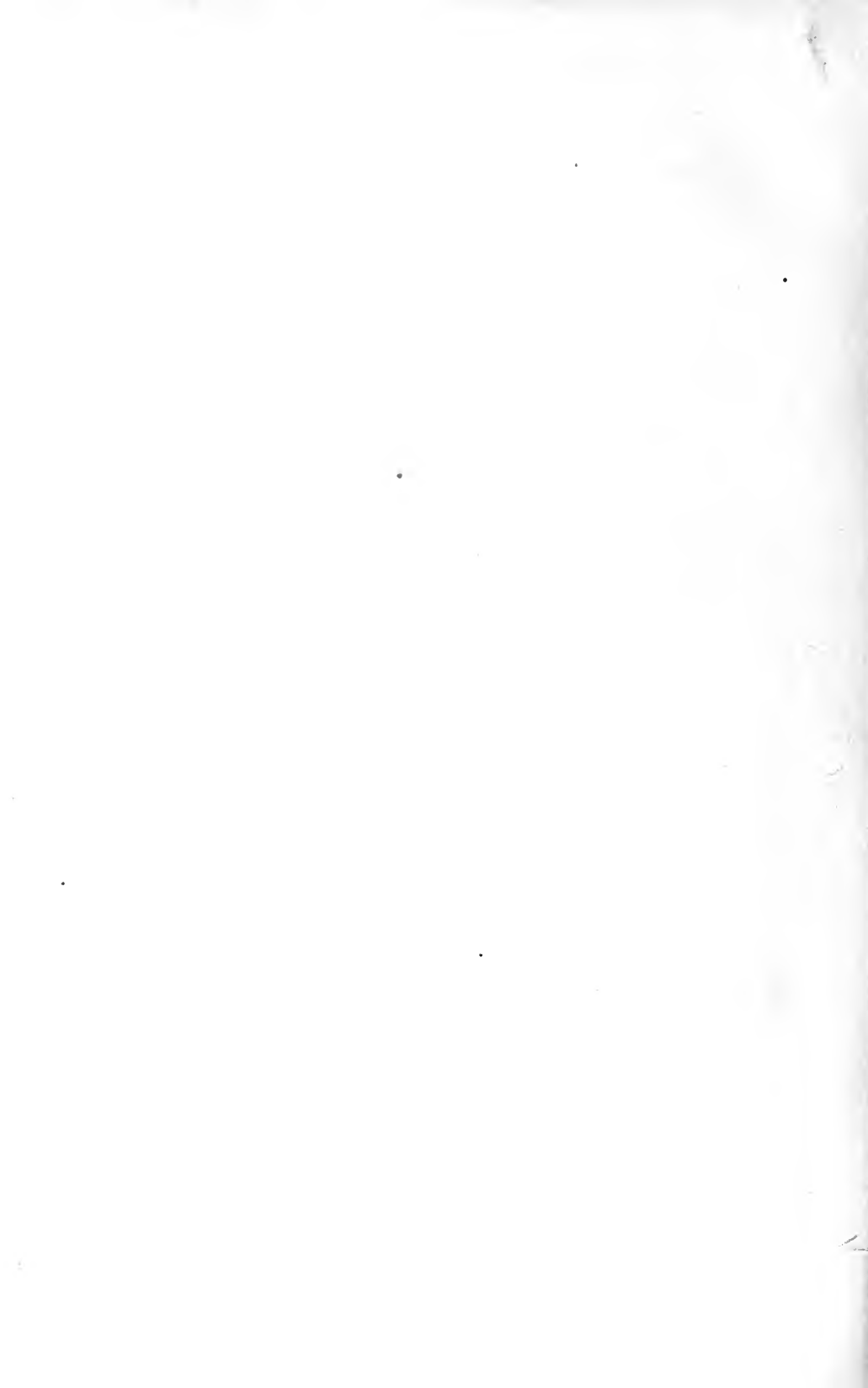
* A preliminary note was published in vol. v of the JOURNAL, pp. 187-8.

¹ They have since been noticed by two writers: F. CRISTOFORI, *Le tombe dei Papi in Viterbo e le chiese di S. Maria in Gradi di S. Francesco e di S. Lorenzo. Memorie e documenti*: Siena, 1887; and G. ROSSI in a pamphlet issued in support of his proposed restoration of the tomb of Clement IV. Neither of these writers covers the ground of this article. Cristofori is familiar with the documents relating to the history of the monuments, and in this respect his work is of value, though hardly exact in its transcriptions. Both writers hardly appear to be acquainted with the related works of the Roman school or with the artistic bearing of the tombs in connection with the history of Italian art.



TOMB OF POPE HADRIAN V. (1276)

IN S. FRANCESCO, VITERBO.



Franciscans and a friend and pupil of Marco. The canopy, the two angels holding back the curtains, the reclining figure of the cardinal, and the base on which it lies, belong to the XIV century: the lower part was added probably during the XVII century. Of two other monuments, one has disappeared—that of Cardinal Vicedomini (d. 1276), whose later tomb was thought to be in the same style as that of Pope John XXI,² *i. e.*, late-Renaissance work—and the other, that of Cardinal Landriano of Milan (d. 1445), is in a fine Gothic style that shows it to be earlier than the time of his death.³ Viterbo originally contained the tombs of four mediæval popes executed at the time of that interesting early revival in art which preceded the Renaissance. These were the tombs of Alexander IV (1254–61), Clement IV (1265–68), Hadrian V (1276), and John XXI (1276–77): of these only two remain, and both of them now stand in the church of San Francesco.

The mausoleum of Hadrian V is in that style of art where the greater part of the decoration is composed of geometric designs executed in small marble-mosaic cubes of various colors. This kind of work is mainly associated with a large group of Roman artists who practised it invariably during a period of nearly two centuries, from the middle of the XII to the middle of the XIV century. It is termed “Cosmati” work, from the name of some of these artists. Hadrian’s tomb stands, in my opinion, in the front rank of the monuments of this beautiful style. It was executed after 1276, when the Roman schools of art had reached their highest grade of excellence, but the name of the artist is unknown. It rises to a height of nearly 22 feet, in three symmetrical divisions: a solid basement; the sarcophagus on which reclines the figure; and the canopy, whose columns rest on the basement. Its type is an earlier one than that which became so popular during the last years of the century, not only with the Pisan school headed by Arnolfo and Giovanni but with the Roman school itself headed by Giovanni Cosmati. In this later type, the form of

² PAPEBROCH (*Conatus ad Catal. Rom. Pontif.*, pt. II, p. 58) as quoted by Cristofori (*op. cit.* pp. 186–7), says of the monument as it existed at the close of the XVII century: *Idem qui monumentum Joannis XXI delineavit et fabricavit artifex, hoc verosimiliter sæculo, etiam hujus Vicedomini cenotaphium simili forma extruxit et literis similiter elegantiam modernam spirantibus insculpsit epitaphium, stili etiam recentioris, ubi, etc.*

³ The tomb of Cardinal Landriano has been described by Professor OJETTI in the *Mostra della Città di Roma alla Esposizione di Torino nell’anno 1884*. A water-color drawing of it was exhibited at Turin.

the canopy is changed, two curtains are hung, on either side, and each is drawn back by an angel, disclosing the reclining figure of the deceased. Unless the priority be given to the tomb of Hecuba of Cyprus in San Francesco at Assisi, said to have been executed about 1240, the earliest example of this type seems to be the noble monument of Cardinal de Braye, at Orvieto, executed by Arnolfo shortly after 1280 and only a few years after this mausoleum of Hadrian IV, which it does not equal in general beauty though surpassing it in the excellence of its sculpture. And in this connection it may be well to call attention to the fact that, in the decorative part of his monument, Arnolfo undoubtedly copied the Roman school, whose works were already scattered throughout the Papal States, and at Orvieto itself where he worked. This fact confirms the opinion that the Pisan Arnolfo is the same as he whose name appears, with the date 1285, on the beautiful tabernacle of San Paolo at Rome.

Papebroch saw Hadrian's monument some time before it was restored in 1715, and his description is therefore of interest. He says (*op. cit.*, pt. II, p. 58): *Marmorea tabula in qua sculptum est epitaphium, e sub thiara clavibusque papalibus continet insignia gentis Fliscæ. Est autem mausoleum ei quod Clementis IV detinet corpus par, magnitudinis et altitudinis ejusdem, ubi jacet marmoreus pontifex, cappam et pluvialem indutus, cujus fibula rotundo ac radioso monili prætexta agnum Dei continet, in utraque vero ejusdem pluvialis ora representatur, tanquam Phrigionico opere hinc digitum intendens Joannes Baptista, cum his supra caput verbis, ECCE AGNVS DEI, inde Deipara Virgo cum hisce litteris, EN MATER. Is qui recenter mausoleum hoc repoliri fecit in vacante supra papalia insignia pariete, colore rubro pingi jussit titulum in cujus fundo albo, litteris nigris, hoc novi styli epitaphium legitur: ADRIANVS QVINTVS PONT. MAX. FLISCA E FAMILIA NOBILISSIMA JANVENSIS MENSIS VNIVS DIERVMQVE NOVEN MAGISTRATVM PONTIFICVM GERENS DIEM VITERBII FVNCTVS HONORIFICE SEPOLTVR DONATVR. epitaphium istud legitur litteris veteribus ac semilatinis tres lineas implentibus.*

Either Papebroch had a very singular idea of epigraphic accuracy, or, as is probable, the inscription which he reports, belonged to a restoration earlier than that of 1715, and disappeared at that date. Papebroch gives a very inaccurate drawing, which is reproduced by Cristofori, who seems to base upon it, rather than upon the monument itself, the few remarks that he makes upon its form and details: such, for example, as describing the main arch as round instead of

pointed, and speaking of four twisted colonnettes instead of two. Both of these errors were made in Papebroch's drawing.

The basement consists of two parts. Next to the pavement is a plain and widely projecting marble plinth, 72 cent. in height, with double row of mouldings and restored decoration; then the body of the basement, decorated with circles and other geometric patterns and surmounted by a cornice, with a total height of one metre. The entire basement measures 1.72 met. On its projecting angles rest two spiral columns, 2.68 met. high, supporting a canopy formed of a trefoil pointed arch surmounted by a gable, which rises to a height of about 1.85 met. above the columns. The columns have foliated capitals of free Gothic style, reminding of the later work at Orvieto cathedral, and are inlaid with mosaic-work of extreme beauty and delicacy. Within this canopy is placed the sarcophagus, a solid rectangle surmounted by a gable roof with pentagonal edge, and surrounded by a projecting cornice which is supported on the front and sides by well detached spiral colonnettes—one on either corner, and two in the centre of the front, which is thus divided into three compartments, in each of which a porphyry slab is surrounded by a decorative design in glass-mosaic. In all the so-called "Cosmati" mosaic-work, great taste is shown in the combination of forms and colors, and in this monument a perfection is reached which I do not remember to have seen surpassed.⁴

On the wall of the church, within the canopy and over the figure, are two inscriptions: the first is the original epitaph, the second records a restoration in 1715. The first reads: HIC REQ · CORP · S · MEMO|RIE · DÑI · ADRIANI · PP · V | QVI PRIVS VOCATVS OT|TOBOÑ DE FLISCO · DE · JAN · | TIT · S · ADRIANI · DYĀC · CARD. Of the second I will reproduce only the last lines, according to which it would appear that the monument had fallen to ruin at the beginning of the last century, and was restored at the expense of the Fieschi family of Genoa, to which Pope Hadrian belonged. HADRIANVS V · PONT · MAX · | PRIVS OTHOBONVS FLISCVS JANVEN · | EX COMITIBVS LAVANIAE | AB INNOCENTIO IV · EIVS PATRVO | INTER S · R · E · CARDINALES ASCITVS | DOCTRINA PROBITATE PRVDENTIA | CATHOLICAE FIDEI ADMODVM PROFVIT | PLVRIBUSQ · LEGATIONIB' | AC INNVMERIS LABORIB' | DE S · SEDE OPTIME MERITVS | AD PETRI CATHEDRAM EVECTVS EST | AT POST

⁴ Professor Rossi, the restorer of the monument, has spent months in preparing some good colored plates of the monument, especially of the details of the mosaic-work, and the publication of his work may be expected before long.

XXXIX DIES XII KAL·SEPT·MCCLXXVI·|VITERBII DEGENS ANIMAM
COELO|CORPVS VERO HVIC MONVMENTO TRADIDIT|QVOD TEMPORIS
INIVRIA VIOLATVM|PRISTINO DECORI RESTITVENDVM|POSTERI DE
FAMILIA FLISCA|VNANIMES CENSVERE|A·D·MDCCXV·|

Curante F. Josepho Frezza de cryptis huius coenobii guardiano.

The figure of Hadrian V does not recline at right angles with the sarcophagus, but on the outer side of the gable roof which forms its elegant summit, being, thus, far more visible to the public. It is considerably over life-size (1.95 met.) and is dressed in full pontifical robes. The head, which rests on a richly-embroidered cushion, is covered with the simple tiara; the hands, covered with embroidered and jewelled gloves and projecting from the robe (pluvial), are crossed in front. The fibula that attaches the pluvial imitates a gold original with the *agnus dei* enclosed in a circle and is related to an embroidered decoration on either side representing the Virgin and John the Baptist, with the inscriptions as given by Papebroch. The drapery of the embroidered pluvial is arranged in carefully studied folds. Around the feet rest the narrow and delicate folds of the *casula*. The face is evidently a study from nature, by an artist almost untrammelled in the technique of expression. The eyes are closed, the expression one of peaceful sleep; the face is full, the features small and regular. As a work of sculpture, this figure ranks high in its period. In 1276 the Pisan school was but beginning: true, Niccola had executed all his work, but Giovanni and his other followers had hardly begun their careers. Nor are there any earlier works of the Roman school that are comparable to it, the figure of Clement IV, for example, which now stands opposite to it, and was executed nearly a decade before, being immeasurably inferior. In fact, it shows a more advanced art than the sculptures of Roman artists executed a quarter-century later, such as the statues of Nicholas IV, Boniface VIII, Charles of Anjou, and the reclining figures by Giovanni Cosmati. The delicacy and style of the sculptor's chisel are shown also in the head that fills the gable of the tomb and which approaches the traditional type of St. Peter, in the charming cherub-heads in the trefoils and in the two small and sprightly laughing semi-busts that support the trefoils of the canopy.

The wall-space over the statue, partly occupied by the modern inscription, contained, according to Cristofori, a mosaic representing John the Baptist, patron of Genoa, the birthplace of the Pope. It seems more probable that this figure was, according to custom, placed by the side of the group of the Virgin and Child enthroned.

It is not easy to define the amount of restoration. A part of the mosaic-work has been renewed; this is especially the case in the large twisted columns. The right-hand trefoil has suffered, even in the head of the cherub. But the lower basement and the parts of the monument next to the wall have long since lost their original decoration: this is the case with the consols, engaged columns and pilasters.

There being no record on the monument itself or in tradition as to the author of this important work, let us examine the various schools of Roman artists of this period for clues to his identity. He must have



FIG. 1.—*Aedicula by Vassallectus.*

been one of the foremost men of the school: none other would have been selected for so important a work. There were at that time two leading families of artists whose works are found throughout the Roman province, the Cosmati and the Vassallecti. Two other schools, also, had flourished in the XII century, those of Ranucius and Paulus, but they had by this time disappeared. Of the Cosmati, Cosma II was the most prominent artist at this time, his son Giovanni not taking the lead of the school until fifteen or twenty years later. But we do not know that Cosma II executed any tombs, his principal work being the chapel of the *Sancta Sanctorum* at the Lateran (1277).

Of the other family, the VASSALLECTI, the best-known of this name was flourishing at that time. His works have been briefly alluded to by Comm. G. B. de Rossi⁵ and Enrico Stevenson.⁶ It is to him that I attribute the execution of the monument of Hadrian V, my reasons being two-fold—circumstantial and artistic.⁷ In the left-hand wall of the choir is set an *aedicula* with the inscription: S. OLEUM INFIRM-

⁵ *Bullettino di Archeologia Cristiana*, 1875, p. 129, etc.

⁶ *Mostra della Città di Roma*, etc., pp. 173-4; *Conferenze dei Cultori di Archeologia Cristiana*, pp. 107, 123.

⁷ I mentioned my conjecture to Professor Rossi, in 1887, and believe that he has adopted it.

ORUM. Two twisted colonnettes support a gable and rest on a base. On the lower part of the base is the artist's signature: ⁸ M VASSALLECTVS < ME FECIT (Fig. 1). I am not aware that it has ever been published. This *aedicula* is in the usual Roman style of patterns in mosaic. It is evident, then, that Vassallectus worked for the church of San Francesco: but he could hardly have been called there for such a paltry piece of work, which would appear to have been merely a production of his workshop. We must seek some other cause for his coming to Viterbo and what else should that be than the tomb of Hadrian? This, then, would be one of Vassallectus' two masterpieces, the other being the cloister of San Giovanni in Laterano at Rome. It may be that he signed it and that the signature has been lost in all that the monument underwent, including the restoration of 1715. But what artistic evidence can be brought to support this circumstantial conjecture? A review of the known works by Vassallectus may accomplish this: the following is a list of them.

- 1.—c. 1220–30. Roma: Cloister of San Giovanni in Laterano.
- 2.—c. “ Ch. SS. Apostoli; Lion of portal(?).⁸
- 3.—c. “ Bas. Santa Croce in Jerusalemme; Episcopal chair(?).⁹
- 4.—c. “ Bas. San Pietro in Vaticano.¹⁰
- 5.—c. Anagni: Cathedral; Paschal candlestick.¹¹
- 6.—1263. “ Ch. Sant Andrea; Episcopal chair.
- 7.—c. 1276. Viterbo: Ch. San Francesco; Aedicula for holy oil.

Of these works Nos. 3 and 4 have entirely disappeared, leaving only the inscriptions; No. 2 is but a mutilated fragment; No. 7 is of little

⁸The inscription on the lion reads: *Bassaleus me fecit*: the lion stands in the porch.

⁹This inscription was first published in 1887 by Professor ARMELLINI on p. 206 of his work *Le chiese di Roma dalle loro origini sino al secolo xvi*. It was recently found on a slab that had been used, face downward, in the pavement of the basilica when it was rebuilt by Benedict XIV. Armellini adds: *Quella pietra spettava probabilmente alla Cattedra episcopale situata in fondo all' abside della basilica, e vi si legge il nome del marmorario così: BasSALLECTVS ME FECIT*.

¹⁰DE ROSSI quotes (*Bullettino, loc. cit.*, p. 127) the inscription given by Pietro Sabino, without any clue to the monument to which it belonged: OPVS MAGISTRI VASSALETI QVOD IPSE FECIT.

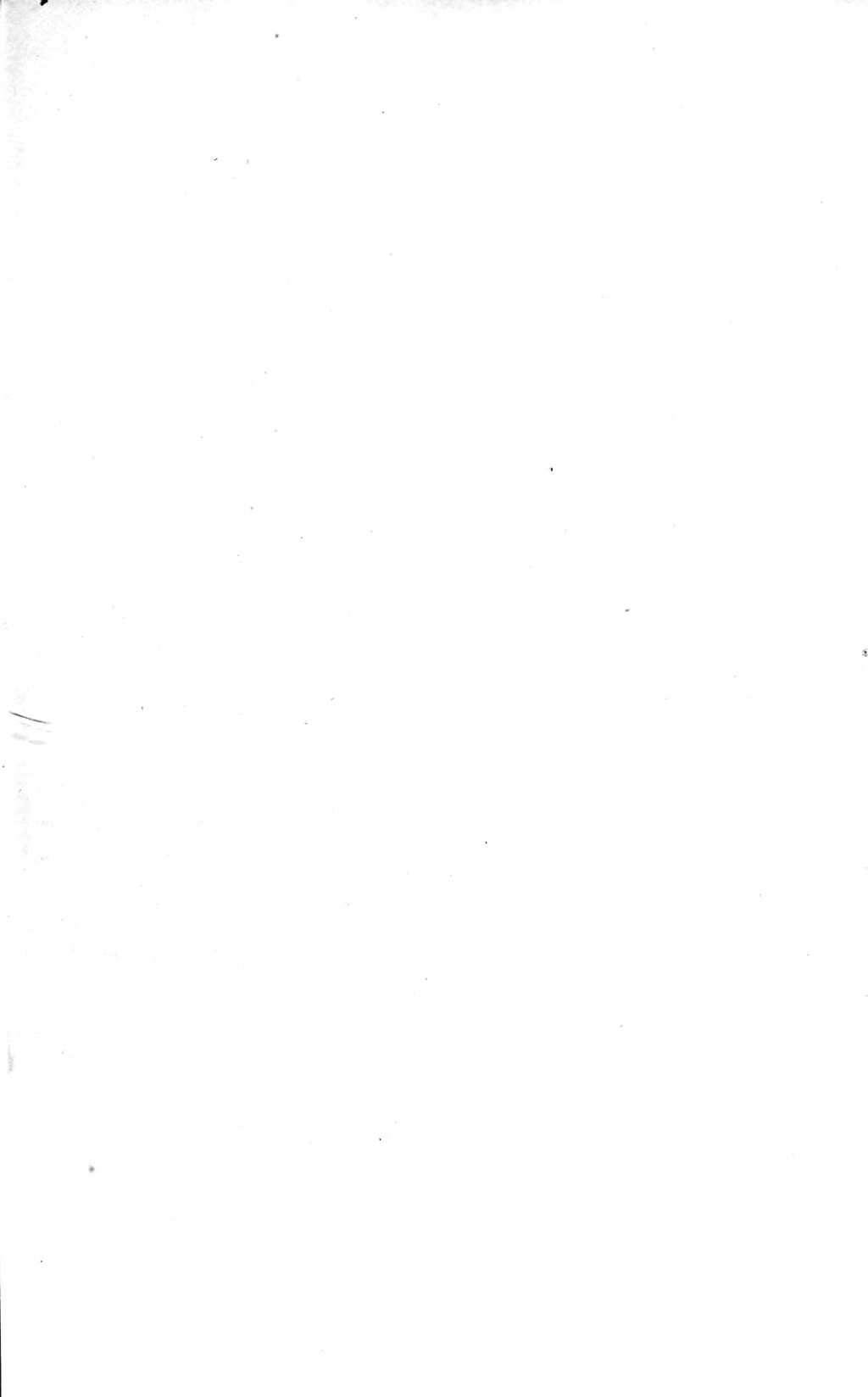
¹¹The candelabrum is supported on two sphinxes, while above the column a *putto* or boy sustains the base for the candle. The inscription reads: VASSALLETO ME FECIT.



EPISCOPAL THRONE BY VASSALLECTUS
IN CATHEDRAL MUSEUM. ANAGNI.

and may be placed among the finest pieces of work produced by the early revival in sculpture. They were, let it be remembered, carved in 1263, before the pulpit at Siena had been executed, while Giovanni Pisano was a mere child, before any influence of Niccola could have been felt in the Roman province. These lions of 1263 are further evidence of the fact, that, when an artistic revival takes place, there are two elements to be reckoned with: (1) the general birth in the artistic consciousness, leading to independent creative efforts in various regions at the same time; (2) the individual influence of a leader over the art of the period. Following Vasari, we have commonly taken into account only the second of these elements in a study of the revival in sculpture in the XIII century. What is now needed is a study of the works of Southern Italy and the Roman States. The wonderful sculptures of Ravello and Capua, contemporary with Niccola but finer than most of his work, are well known but not yet accounted for. Other works of merit executed in these regions between 1250 and 1325 would almost equal in number the contemporary works in Tuscany. The really classic character sporadically given to many works of architecture in this part of Italy, throughout the XIII century, is a related movement. I shall content myself with merely indicating the possibilities of the subject. Stevenson calls attention to the fact that the Vassalletti studied the antique, as one of them is known to have had a statue of Aesculapius as a model in his workshop. The bearded sphinx in the Lateran cloister indicates a study also of Egyptian works of sculpture. The classic elements in the decoration—in both carving and mosaic-work—used by the schools of Laurentius and Vassalletus, and their revival of certain classic architectural features—such as the architrave, the Ionic and Doric capitals, and the gable—may be mentioned, by the way, in order to indicate some peculiarities of the revival of Roman art in the XIII century.

Like most of his compeers among the leading artists of this school, Vassalletus was architect, sculptor, and mosaicist, and in each of these branches appears to have surpassed his contemporaries in the Roman province. As we have several of his inscriptions without the works to which they were attached, may it not be possible to identify some remaining works whose inscriptions have perished? Such a one appears to me to be the ciborium of Santa Cecilia in Trastevere at Rome. Its similarity in general characteristics to the famous one executed for San Paolo by Arnolfus and Petrus, in 1280, has apparently led to its attri-





TOMB OF POPE CLEMENT IV.

IN S. FRANCESCO, VITERBO.

bution to Arnolfus, who is by most thought to be the Florentine architect. There seems to be but little evidence in favor of this supposition: merely a tradition that it was signed by Arnolfus. S. Cecilia is said to have been restored in 1283, and this is an approximate date for this ciborium. A comparison between the two ciboria shows that a community of authorship is improbable. The architectural forms of that of S. Cecilia are more symmetric and also indicate an earlier date by the lowness of pointed arch and gable. Its sculptures excel those of the ciborium of San Paolo, and are in a style very similar to those of the tomb of Hadrian: the analogy is especially evident in the heads. I do not know of any other Roman artist than the author of Pope Hadrian's mausoleum who would be capable of executing the figures and reliefs of the ciborium of Santa Cecilia. This identification is the only one I would suggest.

II. TOMB OF CLEMENT IV (PL. IX).

Opposite the monument of Hadrian V, which we have been describing, stands the lower portion of another, similar in style, though, even in its present fragmentary condition, it is evident that its artist was inferior in merit to Vassalletus or whoever may have erected the tomb of Hadrian. This second monument is that of Pope Clement IV (1265-68), and has undergone many vicissitudes. By its side is the monument of Petrus de Vico. Both of these originally stood in Santa Maria dei Gradi. This church was a notable example of early-Gothic architecture, commenced in 1220 or 1221 and consecrated by Pope Alexander IV in 1258. The latter date was proved by an inscription on the façade, which also gave the name of the artist who executed the rose-window, *MAGISTER BONOSEGNA*. In style this church was similar to that of San Martino al Cimino, also founded, at an earlier date by Cardinal Raniero Capocci and described in another paper in this Journal. Cardinal Capocci gave the monastery to San Domenico, and it became the first home of the order in Viterbo. Within the church of Santa Maria, a number of monuments were erected shortly after the middle of the XIII century; and among them were the two mentioned above, which I will proceed briefly to describe. The following description of the tomb of the famous Vico family, several members of which were prefects of Rome, is taken from SALMINI's *Chronologia Gradensis* (p. 292) as quoted by Cristofori (p. 64): *Familia de Vico. Major pars Praefectorum Romanorum, hujus*

familiae, in hac est sepulta ecclesia, in qua, opere musivo ac deaurato, sepulchrum valde pulchrum et extimabile eorundem erectum cernitur. Inter alios Dominus Petrus De Vico, Praefectus Romanus, qui obiit anno MCCLXVIII, in sepulcro praefato, factum eadem idea qua Clementis Quarti et ab eodem artifice, sed, ut notum est, a contrariis factionibus sacrilege, inhumane, et impie fuit devastatum et per templi pavimentum ejus ossa projecta, etc. The epitaph over the tomb, which was originally placed to the left of that of Clement IV, in the chapel of San Domenico, reads (CRIST., p. 71): HIC · NOBILIS · VIRI · PETRI · DE · VICO · | PRAEFFECTI · ROMANI · | AC · NONNVLLORVM · ETIAM · EISDEM · NATALIBUS · | AC · DIGNITATE · INSIGNIVM · | CORPORA · CONDITA · JACENT. The wording is more modern than the monument.

Nothing remains of the arched canopy that surmounted the tomb, of the mosaic or fresco within it, or of the reclining statue: only the basement is left. This basement confirms the opinion that the entire work is by the hand of the author of the tomb of Clement IV. This is all the more probable because Petrus de Vico died in 1268, the very year of the death of Clement.

On the death of Clement IV (November 29, 1268¹³) the cardinals gave directions to the papal chamberlain, the archbishop of Narbonne, to have a marble sarcophagus executed. This charge was accomplished by him, as is testified by a bull of Gregory X, which will soon be quoted. The monument was executed for the Dominican church of Santa Maria dei Gradi because Clement had expressed a wish to be buried there;¹⁴ but the canons of the cathedral of San Lorenzo were ambitious to possess the body with its mausoleum, and caused both to be transported by force to the cathedral. According to Nobili's chronicle, the mausoleum was then only begun.¹⁵ The dispute be-

¹³ Cristofori has collected, on p. 25 of his work, the various texts regarding the death of Clement IV.

¹⁴ CRISTOFORI, *op. cit.*, p. 14: *Dopo solenni funerali, verso la metà di dicembre dell'anno 1268, venne sepolto nella chiesa di S. Maria dei Gradi in Viterbo, entro magnifico monumento marmoreo di stile ogivale, intagliato, adorno intorno di mosaici secondo lo stile bizantino. Il Papa è rappresentato dormente con l'infula episcopale in capo, le mani conserte sul petto, coperto del manto pontificio che scende fino ai piedi sporgenti fuori con le scarpe crucigere poggiate sopra un cuscino. Un' iscrizione sopra il monumento ricorda che circa il 1840 il Sig. Conte Foy de la Tour Maubourg, Ambasciatore di Francia in Roma, fece ristaurare il monumento devastato, come dissi, dai repubblicani nel 1798.*

¹⁵ *Die XXII ejusdem mensis Novembris (Clemens IV) in morbum incidit et Viterbii, ubi tunc curia residebat, die XXIX ejusdem mortuus est. In ecclesia Gradensi corpus suum sepe- liri mandavit. Die XXIX ejusdem mensis Novembris coruscare cepit, indeque populi, ejus*

tween the two churches for the body of the Pope began at once and was long and bitter. It is to be inferred that the monument was finished in 1271. At that time the Cardinals Guillaume de Bray and Uberto di S. Eustachio, who had been appointed to be judges in the dispute between the two churches, decreed that the monument should be returned to the Gradi church,¹⁶ and that all work begun on it at the cathedral should be discontinued. But the canons of the cathedral refused to obey their orders, as well as those of Cardinal Annibaldeschi di S. Marco, appointed arbitrator, a few years after, by the new pope, Gregory X, who wrote four bulls regarding the matter.

Pope Gregory in his first bull, dated from Lyons, August 12, 1272(?), in the third year of his pontificate, thus speaks of the mausoleum: *tamen super eo quod praedicti Archipresbiter et capitulum quoddam sepulchrum marmoreum, quod Venerabilis frater noster Petrus Archiepiscopus Narbonensis, tunc sedis Apostolicae Camerarius, pro sepeliendo eodem corpore fabricari fecerat, contra prohibitionem ipsius Archiepiscopi ac etiam S. R. E. Cardinalium et postquam denunciationem novi operis est factam temere accipere, ac in eadem Viterbiensi ecclesia construere praesumpserunt nihil penitus decrevisti.* This would seem to show that, although the mausoleum may not have been finished when the canons took possession of it, the artist completed his work while it stood in the cathedral. After much litigation, the details of which would be unimportant, the tomb was finally replaced in the Gradi church in 1276. Cristofori (p. 34) divides the history of the monument into four periods, which are correct with some variations of date: (1) 1268-70, when it lay, partly finished, in the church of Gradi. (2) 1270-75, when it lay in the cathedral. (3) 1276-1738, when the mausoleum again rested in the church of Gradi: it was placed *ante capellam majorem in latere honorifice ut patet collocatum.* This position, at one side of the apse, may not have been the original

sacritate et miraculis moti, ad ejus sacrum cadaver visendum, tangendum confluere. Unde presbiteri et clerus cathedralis in ecclesia sua corpus dicti sancti Pontificis contra patrum praedicatorum voluntatem, tumultuandum curarunt. Facta autem instantia per dictos patres apud Reverendissimos Dominos Cardinales, ab eis ordinatum fuit ut quo interea fabricaretur sepulchrum, per Dominum Archiepiscopum Narbonensem corpus in quodam loco, tanquam in depositum collocaretur. Presbiteri cathedralis inde eum auferentes, in eorum ecclesiam, tam inchoatum marmoreum sepulchrum, quam corpus sanctissimi pontificis detulerunt, et illud prosequerantur (NOBILI, MSS. in Chronicon Conv. Graden. ap. Papebroch. in Conatu, cited by CRISTOFORI, p. 27).

¹⁶ The text is given in CRISTOFORI, *op. cit.*, pp. 112-14.

one : it is more natural to suppose that the monument was placed near the door. (4) 1738–1885. In 1571, or more probably in 1738, at the time of a restoration of the church, the mausoleum was transferred to the chapel of San Domenico.

The French Republican troops under General Macdonald attempted to demolish the tomb in 1798, and probably the canopy was then torn down : whether it was replaced in 1840 by Count de la Tour Manbourg, when he restored the monument, I am unable to say. In May, 1885, it was scandalously violated by the municipal authorities and then transferred to the church of San Francesco. The original epitaph was copied by Papebroch and is well known. It is in Leonine verses, and consists of nineteen lines that describe the life and virtues of the Pope.

We find in Papebroch¹⁷ a description of the monument, before it had been entirely ruined and taken to pieces, and his words are important not only on this account but because they disclose to us the name of the artist of the monument, then legible in the half-defaced inscription : *Tumulum (Clementis IV) Viterbi curavi excipiendum in chartam oculisque per sculpturam exhibendum, pro venerandae antiquitatis memoria. Est opus universum latum palmos XV, altum XXXI elegantibus musivis seu varii aureique coloris lapillis emblematicè distinctum in cujus summitate, sub capite S. Petri, apparent sex lilia, quae potius Francicae originis indicium esse crediderim, etc. . . . Ad latus marmoris ex caeruleo fundo sub Deiparae sculpta imagine eminentis epitaphium longum litterisque Gothicis, id est Theutonicis, alte incisum continentis flecti saepius jam memorata Sancta (Edviges), de qua ex altero latere legitur litteris fere Romanis : IN HAC SACROSANCTA ECCLESIA, etc. . . . Sequuntur autem duo versus studiosè ut videtur erasi, qui proinde legi non potuerunt, sicut etiam proinde sub ipso arcu intercesi flexus sic scripta :—PETRVS ODERISI SEPVLCRI FECIT HOC OPVS . . . —legi non potuit aliud quod sequebatur verbum, neque nota anni, quod factum opus indicabatur. Similiter evanuerunt litterae minio ductae supra tumbam, jacentes ad pedes episcopi, nisi quod initio, videantur adhuc legi :—PETRVS GROSSVS. An earlier writer had read more than this : PETRVS GROSSVS DE SANCTO AEGIDIO . . . HIC JACET.*

PETRUS ODERISI OR PIETRO ODERIGI was, then, the author of the monument of Clement IV, between 1268 and 1271, a fact not known to those who have investigated the subject of these Roman artists of

¹⁷ *Op. cit.*, pt. 2, p. 54.

the Middle Ages. Can he be identified as the author of any other works? The number of artists named *Petrus*, belonging to the Roman school, who flourished during the XIII century makes the identification difficult. A list of them is given in this JOURNAL, vol. v, pp. 187-8; to this list should be added the *Petrus* of the ciborium of San Paolo, of 1280, and the *Petrus Gusmati marmorarius de regione viae Latae*¹⁸ of 1296. None of them, however, are known to bear the surname *Oderisius*, and it can only be conjecture to identify the artist of the tombs of Clement IV and of the Prefect de Vico with, for example, the author of the shrine of Edward the Confessor at Westminster (1269), or of the ciborium of San Paolo.¹⁹

A few words of description will suffice for the tomb of Clement IV. The rough drawing made by Papebroch shows it to have originally consisted, like Hadrian's monument, of three parts, basement, sarcophagus, and canopy with trefoil pointed arch and gable. His measurements gave it a height of 31, and a width of 15, palms. It had, besides, two other features: (1) a supplementary sarcophagus placed in front of the basement, on which reclines the figure of the Pope's nephew, Pierre le Gros; (2) a statue of the Virgin and Child placed under the canopy, above the figure of the Pope. As it at present stands, nothing is in place but the basement and the sarcophagus. Numerous fragments, however, of the canopy are scattered about in the storehouse, and appear to be amply sufficient to ensure an accurate restoration. Although the conception of this monument is the same as that of Hadrian, as whose prototype it may even be considered, its proportions are not as perfect, nor are its decorative details

¹⁸ *Mostra della Città di Roma, etc.*, p. 180.

¹⁹ Another authorship has, apparently in ignorance of the lost inscription, been lately suggested for this tomb. Signor R. OJETTI discovered, a few years ago (*Mostra della Città di Roma, etc.*, p. 184), parts of a monument on which is inscribed the name of a Roman artist—sculptor and mosaicist—named *Pascalis*, belonging to the Dominican order, with the date 1286. The inscription was on the base of a sphinx which together with a lion supported the water basin placed at the entrance of the refectory of the monastery of Santa Maria de' Gradi. It reads: HOC · OPVS · FECIT · FR · PASCALIS ROM · ORD · PD · A · D · MCCLXXXVI. These two animals originally formed part, in Sig. Ojetti's opinion, of one of the monuments in the "Cosmatesque" style which were originally in this church of Sta. Maria de' Gradi: and belonged either to that of Clement IV or to that of the Vico family. It has just been shown that *Pascalis* could not have executed these mausoleums, and the late date, 1286, confirms the idea that the work to which the inscription of *Pascalis* belongs must be some other—perhaps the episcopal throne or a choir-screen.

as artistic, either in sculpture or in mosaic. The sarcophagus was not executed for the purpose but was an ancient Roman work: the antique strigillation is still preserved in the back, which was not intended to be visible. This explains the irregularities of the surface. The measurements of the monuments are as follows: figure, 1.55 met.; its sarcophagus, length, 2.12 met., width, 65 cent.; its basement, length, 2.35 met., height, 1.22, width, 45 cent., besides 28 cent. for the corner piers. The sarcophagus projects at the rear far beyond the line of the base. In the six pointed arches that decorate the front, the colonnettes have a width of $7\frac{1}{2}$ cent. and a height of 33 cent., and stand 29 cent. apart. The plain strip on which they rest is 13 cent. high. The corner piers originally supported the front columns of a canopy similar to that of the tomb of Hadrian, which can easily be reconstructed from the disjointed pieces. I have heard that this is at present being attempted.

Clement IV was a Frenchman, and it is a current theory that the sculptor of his tomb was a compatriot: but this is disproved by the style of the work. It shows the same Roman mosaic patterns worked down the front and around the shoulders of the pontifical robes as are seen in other works of the school. The sculpture, also, is quite unlike French work. The figure is roughly hewn out and unfinished; the folds of drapery are sharp and deep; the head is rude, and the closed eyes add to the expressionless effect. It is the work of a master who had not yet felt the vitalizing influence of Vassalletus, though it is good for its time. Although the five colonnettes supporting the trefoil arches are inlaid with mosaics, yet, in general, it may be said that this decorative means is employed with less richness than in Hadrian's tomb.

The two monuments that have been here studied may be considered to be the most important of their class both as to age and beauty. They enable us to trace this type of tomb further back; and they show us its most sumptuous form. The Pisan school, with Niccola at its head, perfected the sculptured pulpit; the Roman school created at the same time that most artistic form of the mediæval tomb, which united in itself all the arts and so struck the artistic fancy of Giovanni Pisano and Arnolfo, the followers of Niccola, that they adopted all its features, as is shown by Arnolfo's tomb of Cardinal de Braye (1286) and by Giovanni's tomb of Pope Benedict XII (1311). It may be, however, that local taste dictated the style to the Tuscan

artists in the case of both tombs just mentioned. Cardinal de Braye was one of the arbiters of the dispute about the mausoleum of Clement IV, and his familiarity with it and with that of Hadrian V may have led him to prescribe the Roman type for his monument. In any event, the amusing theory that the Roman artists derived from their Tuscan contemporaries this form of monument is utterly incorrect. In the Roman school itself nothing was done that could compete with these two monuments; those executed in Rome by Giovanni Cosmati thirty years later being inferior in their general style and in the quality of their art.

A. L. FROTHINGHAM, JR.

Princeton College,
June, 1890.

PAPERS OF THE AMERICAN SCHOOL OF CLASSICAL
STUDIES AT ATHENS.
THE PLATAIAN FRAGMENT OF THE EDICT
OF DIOCLETIAN.

[PLATE X.]

NOTE.—The inscription here published by Professor Mommsen was discovered at Plataia during the excavations of the American School of Classical Studies at Athens, in the month of March, 1890 (see this JOURNAL, vol. VI, p. 447). While the Latin Preamble found in the previous year and published by Messrs. Tarbell and Rolfe (JOURNAL, vol. V, pp. 428–439), came from the site of the Byzantine Church marked I in Messrs. Washington and Hale's map of Plataia (vol. VI, pl. XXIII), this Greek fragment of the Edict of Diocletian was found in Church V at a considerable distance to the southwest of Church I. This slab together with another containing an inscription with female names and dedicated to some goddess (Artemis or Demeter), served as covering-stones to a Byzantine grave immured in the west wall of the church. The hypothesis expressed by me (*l. c.*) that the Latin Preamble may have preceded the Greek text of the edict containing the prices of which this inscription forms a part may lack sufficient foundation. There would, if this were not the case, have been a Greek as well as a Latin version of the edict at Plataia.

CHARLES WALDSTEIN.

The slab of white marble, of which we offer a facsimile [PL. X] after the drawing of Mr. Lolling, is 1.10 m. high, where it is best preserved; 3.73 broad; and between 0.09 and 0.10 in thickness, as it is not worked smoothly on the back. The form of the crowning ornament is shown in the plate; the letters engraved there are of no importance, having been added afterward by some idler. The two sides are wrought so that other slabs could be joined to this and form with it a whole. The slab, in its present state, has lost the left corner and the lower part, so that of the three columns it contained when complete, the first 44 lines of the first column are reduced to a few letters



and all three are defaced at the bottom. In its present state the first column numbers 76 lines, mostly incomplete, the second and third 68 lines each. As the part wanting between the second and third columns has been preserved in the other fragments of the Edict, corresponding to ch. 17, 18–50—i. e., 33 lines of my edition,—the number of lines of the slab in its complete state must have amounted to about 100. This cannot be ascertained exactly, as the division of the lines is not at all regular.

For the arrangement of the Edict generally the Plataian fragment is very useful, though it only confirms the arrangement adopted in my edition conjecturally. It shows that what is there given as ch. 16, really preceded the following, and it allows a nearly complete restitution of these two important chapters.

I give the text as it has been copied, with his habitual accuracy, by Mr. Lolling, corrected in a few passages by the squeeze he sent me. I have added the variations of the other texts, so far as they correspond with the new one; where the defects of the Plataian copy are filled up by another, the supplements have been put in brackets []. In general the reader is referred to my recent paper on the Edict in *Hermes* (vol. xxxv, pp. 17–35), where he will find indicated all the fragments discovered since my edition of the Edict in the *Corpus Insc. Lat.*, vol. III (1873), p. 801 seq. It is marvellous how much has been added to the old stock in the last few years, and it may well be admitted that this growth is due not so much to good fortune, as to the growing energy and intelligence of studious researches.

FIRST COLUMN.

16, 40	21	[ἰς χλαμύδα Μουτουννησίαν ὁ. α	✕] KE
16, 41	22	[ἰς χλαμύδα Λαδικηνήν Μουτουννησίαν ὁ. α	✕] KE
16, 42	23	[βαρβαρικαρίῳ διὰ χρυσοῦ ἐργαζομένῳ]	
	24	[ὑπὲρ ἔργου πρωτείου	✕] 'A
16, 43	25	[ἔργου δευτερείου	✕] Y N
16, 44	26	[βαρβαρικαρίῳ ἰς ὀλοσηρικὸν ὑπὲρ ὁ. α]	✕ Φ
16, 45	27	[ἔργου δευτερείου ὑπὲρ ὁ. α] ✕ Y
16, 46	28	[σηρικαρίῳ ἐργαζομένῳ εἰς σονφειρικὸν τρεφομένῳ]	✕ KE
16, 48	29	[εἰς ὀλοσηρικὸν σκουτλᾶτον] ✕ Z
16, 49	30	[γερδιά τρεφομένῳ ὑπὲρ εἰματίου πεξοῦ τῶν ε]	ἰς πα-

16, 42, IΩ PLAT. 16, 47, ἰς ὀλοσηρικὸν ἔσημον τρεφομένῳ ἡμερήσια ✕ KE is wanting in PLAT. 16, 48, ✕ Z thus PLAT. and KARYST. ✕ M THEB.

	31 [ράδοσιν ἡμερήσια]	* IB
16, 50	32 [ἐν εἰματίοις Μουτουνησίοις ἢ τοῖς] λοιποῖς	
	33 [τρεφομένῳ]	* IB
16, 51	34 [λ . . . αρ ζομένῳ Μουτουνησί]α ἢ θα-	
	35 [λάσσια τρεφομένῳ λ.]α	* M
16, 52	36 [τεινὴν ἢ Λαδ]ικηνήν	
	37 λι. α.	* Λ
16, 53	38 [δευτερείας ὑπὲρ] λι. α	* K
16, 54	39 τριτείας ὑπὲρ] λι. α	* IE
16, 55	40 [εἰς] ἔργον πρωτίον	* M
16, 56	41 [εἰς ἔργο]ν δευτερίον τρε.	* K
	42 [περὶ φουλλ]ώνων	
16, 58	43 γναφεῖ ὑπὲρ χλανίδος τῶν εἰς παρά-	
	44 [στασι]ν καινῆς	* N
16, 58a	45 στί]χης τῶν εἰς παράδοσιν καιν.	* KE
16, 59	46 ἀσήμου ἐξ ἐρέας τραχυτέρας	* K
16, 60	47 ἐνδρομίδος ἥτοι ρακάνης καιν.	* Λ
16, 61	48 δαλματικ[ο]μαφόρτου τραχυτέρ.	* N
16, 62	49 δαλματικ[ο]μαφορ. καιν. πεξοῦ καθα.	* P
16, 63	50 στρικτω[ρ. καινῆ]ς πεξῆς καθαρ.	* N
16, 64	51 δαλματικῆς καιν. συ[ψη]ρικ. ἀνδ.	* C
16, 65	52 στίχης καινῆς συψηρικοῦ	* POE
16, 67	53 δαλματικο[μαφόρτου] καιν[ο]ῦ συψ[η]ρ.	* T
16, 68	54 δαλματικῆς ὀλοσειρ]ικ. ἀνδ.	* Y
16, 69	55 δαλματικ[ομαφόρτου καινοῦ] ὀλ[ο]σειρ.	* X
16, 70	56 στίχης [καινῆς ὀλοσειρ]ικοῦ	* CN
16, 71	57 ἀσήμου [καινοῦ ὀλοσειρ]ικοῦ	* C
16, 72	58 χλαμύδ[ος Μουτ]ουνησίας διπλ. και.	* Φ
16, 73	59 χλαμ[ύδος Μου]τουνη. ἀπλῆς	* CN
16, 74	60 φιβλατωρίου Μουτουνη. καινοῦ	* C
16, 75	61 φιβλατωρίου Λαδικηνοῦ καιν.	* E

50 33, IB PLAT. 15 THEB. I KARYST. 16, 55 40, πρωτεῖον ἡμερ. KARYST.
 56 42, ΔΩΝΩΝ PLAT. 16, 61, . . . ἀψέρτου καινοῦ τραχυτέρον THEB. 16, 62, . . .
 ιερτου καινοῦ πεαον καθα. THEB. 16, 64, . . . ψηρικοῦ ἀνδρείας καινῆς THEB. 16, 65,
 . . . ρικοῦ καινῆς THEB. 16, 66, [δελματικ]ῆς συψηρικοῦ ἀσήμου καινῆς * PKE THEB.
is wanting in PLAT. 16, 67, καινοῦ THEB. omits. 16, 68, καινῆς *added in* THEB.
 KARYST. 16, 71, καινοῦ KARYST. . . . ης THEB. 16, 72, χλανίδος καινῆς Μουτουνησίας
 KARYST. THEB. 16, 73, χλανίδος καινῆς M. á KARYST. THEB. 16, 74, καινοῦ Μουτ.
 KARYST. THEB. 16, 75, καινοῦ Λαδ. KARYST. THEB.

16, 76	62	χλαμύδος Λαδικηνῆς καιν.	✕ Γ
16, 78	63	Βίρρου Λαδικηνοῦ καινοῦ	✕ ΡΟΕ
16, 77	64	Βίρρου Νερβικοῦ καινοῦ	✕ Χ
16, 79	65	Βίρρου ρειπησίου καὶ ταυρογαστρικοῦ	✕ Τ
16, 80	66	Βίρρου Νωρικοῦ καινοῦ	✕ Γ
16, 81	67	ὑπὲρ τῶν λοιπῶν Βίρρων	✕ Ρ
16, 82	68	Βίρρων Ἀφρων ἢ Ἀχαικῶν	✕ Ν
	69	περὶ τειμῆς τῶν σιρικ[ῶν]	
16, 83	70	σιρικοῦ λευκοῦ λι. [α	✕ ΜΒ]
16, 84	71	τοῖς τὸ σιρικὸν λύουσι[ν]	
	72	σιν μετὰ τῆς [τροφῆς ὁ. α	✕ ΞΔ]
	73	περὶ πορφύ[ρας]	
16, 85	74	μεταξάβ[λάττης λι. α	✕ Μ ^{IE}]
16, 86?	75	πορφ[ύρας]	
16, 87?	76	πορφ[ύρας]	

Here are wanting about 24 lines, of which the first half corresponds to ch. 16, 88–100 and continues the prices of purple; the latter contained the price of flax.

SECOND COLUMN.

1	φώρμης α	λι.	α	✕ ΑΓ
2	φώρμης β	λι.	α	✕ ΑΖ
3	φώρμης γ	λι.	α	✕ ΩΝ
4	Πάλιν ὅπερ μετὰ τὴν φώρμαν τη.			
5	τρίτην τὴν προειρημένην			
6	φώρμης πρ[ώ]της	λι.	α	✕ ΥΚ
7	φώρμης β	λι.	α	✕ Χ
8	φώρμης γ	λι.	α	✕ ΥΝ
9	Λίνου τραχυτέρου εἰς χρῆσιν τῶν ἰ-			
10	διωτίδων τε καὶ φαμιλ[ι]αρικῶν			
11	φώρμης α	λι.	α	✕ [Ν
12	φώρμης β	λι.	α	✕ ΡΚ[Ε]
13	φώρμης γ	λι.	α	✕ ΟΒ
14	Στίχων ἀσήμων φώρμης		α	

16, 76, χλανίδος καινῆς Λαδικηνῆς KARYST. Λαδικηνῆς καινῆς THEB. 16, 78 and 77 are transposed in KARYST. 16, 79, ἢ ταυρογ. καινοῦ KARYST. 16, 81, ὑπὲρ wanting in KARYST. 16, 84, λύουσιν μετὰ KARYST. 16, 86, βλάττης λι. α KARYST. 16, 87, ὑποβλάττης λι. α KARYST.

15		Σκυτοπολειτανῶν	ίστὸς α	✕ Ζ
16		Ταρσικῶν	ίστὸς α	✕ Ξ
17		Βιβλίων	ίστ. α	✕ Ε
18		Λαδικηνῶν	ίστ. α	✕ ΔΦ
19		Ταρσικ. Ἀλεξανδρεῖνῶν	ίστ. α	✕ Δ
20		φώρμης δευτέρας		
21		Σκυτοπολιτανῶν	ίστ. α	✕ Ξ
22		Ταρσικῶν	ίστ. α	✕ Ε
23		Βιβλίων	ίστ. α	✕ Δ
24		Λαδικηνῶν	ίστ. α	✕ ΓΦ
25		Ταρσικ. Ἀλεξανδρεῖν. ἴστ.	α	✕ Γ
26		φώρμης τρίτης		
27		Σκυτοπολειτανῶν	ίστ. α	✕ Ε
28		Ταρσικῶν	ίστ. α	✕ ΓΦ
29		Βιβλίων	ίστ. α	✕ Γ
30		Λαδικηνῶν	ίστ. α	✕ ΒΦ
31		Ταρσικ. Ἀλεξανδριν. ἴστ.	α	✕ Β
32		Στίχων στρατιωτικῶν φώρμ. α		✕ ΑΦ
33		φώρμης β ✕ ΑΞΝ φώρ[μ]ης γ		✕ Α
34		ἀπὸ λίνου τραχέως εἰς χρῆσιν τῶν ι-		
35		διωτίδων ἥτοι φαμιλιαρικῶν		
36		φώρμης α	ίστ. α	✕ /
37		φώρμης β	ίστ. α	✕ /
38		φώρμης γ	ίστ. α	✕ /Φ
39		Δαλματικῶν ἀσῆμων γυναικίων		
40		φώρμης πρώτης		
41		Σκυτοπολειτανῶν	ίστ. α	✕ ΜΑ
42		Ταρσικῶν	ίστ. α	✕ ᾐ
43		Βιβλίων	ίστ. α	✕ Θ
44		Λαδικηνῶν	ίστ. α	✕ Η
45		Ταρσικ. Ἀλεξανδριν. ἴστ.	α	✕ Ζ
46		Δαλματικῶν ἀνδρίων ἥτοι κολοβι-		
47		ων φώρμης α		
17,	1	48	Σκυτοπολειτανῶν	ίστ. α ✕ ᾐ
17,	2	49	Ταρσικῶν	ίστ. α ✕ Θ
17,	3	50	Βιβλίων	ίστ. α ✕ Η
17,	4	51	Λαδικηνῶν	ίστ. α ✕ ΖΦ
17,	5	52	Ταρσικ. Ἀλεξανδριν. ἴστ.	α ✕ ΞΦ

	53	Δαλματικών γυναικίων φόρμ. β			
17, 6	54	Σκυτοπολειτανών	ίστ.	α	✕ 'Θ
17, 7	55	Ταρσικών	ίστ.	α	✕ 'Η
17, 8	56	Βιβλίων	ίστ.	α	✕ 'Ζ
17, 9	57	Λαδικηνών	ίστ.	α	✕ 'ς
17, 10	58	Ταρσικ. Ἀλεξανδριν.	ίστ.	α	✕ 'ΔΦ
	59	Δαλματικών ἀνδρίων ἥτοι κολο-			
	60	βίων φόρμης β			
17, 11	61	Σκυτοπολειτανών	ίστ.	α	✕ 'ΖΦ
17, 12	62	Ταρσικών	ίστ.	α	✕ 'ςΦ
17, 13	63	Βιβλίων	ίστ.	α	✕ 'ς
17, 14	64	Λαδικηνών	ίστ.	α	✕ 'Ε
17, 15	65	Ταρσικ. Ἀλεξανδρ.	ίστ.	α	✕ 'Δ]Φ
	66	Δαλματικών γυναικί[ων]			
17, 16	67	Σκυτοπολειτ[ανών	ίστ.	α	✕ 'Ζ]
17, 17	68	Ταρσικῶ[ν	ίστ.	α	✕ 'ς]
Here must follow 17, 18-50 of my edition.					

THIRD COLUMN.

17, 51	1	Λαδικηνών	ίστ.	α	✕ 'Γ
17, 52	2	Ταρσικ. Ἀλεξανδ.	ίστ.	α	✕ '[ΒΦ]
	3	Ἀπερ ἀπὸ φόρμης γ' ἥττονα			
	4	εἰσὶν ἀναβολέων			
17, 53	5	φόρμης α	ίστ.	α	✕ '[BCN]
17, 54	6	φόρμης β	ίστ.	α	✕ 'ΑΥΝ
17, 55	7	φόρμης γ	ίστ.	α	✕ 'ACN
	8	Ἀπὸ λίνου τραχαίος εἰς χρῆσιν τῶν			
	9	[ἰδιω]τῶν ἥτοι φαμιλιαρίων			
17, 56	10	φόρμης α	ίστ.	α	✕ Ω
17, 57	11	φόρμης β	ίστ.	α	✕ Χ
17, 58	12	φόρμης γ	ίστ.	α	✕ Φ
	13	Φακιαλίων ὑσήμεων φόρμ. α			
17, 59	14	Σκυτοπολειταν.	ίστ.	α	✕ 'ΓCN
17, 60	15	Ταρσικῶν	ίστ.	α	✕ 'Γ
17, 61	16	Βιβλίων	ίστ.	α	✕ 'ΒΦ

III, 4, EYEN GER. III, 8, *τραχαίος* should be *τραχέως*. III, 9, "Perhaps the first l of ΙΔΙΩΤΙΔΩΝ II, 9, 10 served not only for the second column, but also for the third." Lolling. 17, 61, *Βιβλίων* GER. *almost always*.

17, 62	17	Λαδικηνῶν	ίστ.	a	✕ BCN
17, 63	18	Ταρσικ. Ἀλεξαν.	ίστ.	a	✕ ἈΥΝ
	19	φώρμης β			
17, 64	20	Σκυτοπολειτ.	ίστ.	a	✕ ΒΦ
17, 65	21	Ταρσικῶν	ίστ.	a	✕ ΒCN
17, 66	22	Βιβλίων	ίστ.	a	✕ ΒCN
17, 67	23	Λαδικηνῶν	ίστ.	a	✕ Β
17, 68	24	Ταρσικ. Ἀλεξανδ	ίστ.	a	✕ ΑΦ
	25	φώρμης γ			
17, 69	26	Σκυτοπολειταν.	ίστ.	a	✕ BCN
17, 70	27	Ταρσικῶν	ίστ.	a	✕ Β
17, 71	28	Βιβλίων	ίστ.	a	✕ ἈΥΝ
17, 72	29	Λαδικηνῶν	ίστ.	a	✕ ΑΦ
17, 73	30	Ταρσικ. Ἀλεξ.	ίστ.	a	✕ ACN
	31	Ἀπερ ἀπὸ φώρμης τῆς προειρη-			
	32	μένης καταδεέστερα εἶεν			
	33	Φακιάλια			
17, 74	34	φώρμης α	ίστ.	a	✕ A
17, 75	35	φώρμης β	ίστ.	a	✕ ΥΝ
17, 76	36	φώρμης γ	ίστ.	a	✕ Φ
	37	ἀπὸ λίνου τραχέος εἰς χρῆσιν τῶν			
	38	ιδιωτῶν ἤτοι φαμιλιαρίων			
17, 77	39	φώρμης α	ίστδ.	a	✕ TN
17, 78	40	φώρμης β	ίστ.	a	✕ [ΚΕ]
17, 79	41	φώρμης γ	ίστ.	a	✕ C
	42	Καρακάλλων φώρμης α			
17, 80	43	Σκυτοπολειταν.	ίστ.	a	✕ ΓΦ
17, 81	44	Ταρσικῶν	ίστ.	a	✕ Γ
17, 82	45	Βιβλίων	ίστ.	a	✕ ΒΦ
17, 83	46	Λαδικηνῶν	ίστ.	a	✕ ΒCN
17, 84	47	Ταρσικ. Ἀλεξανδ.	ίστ.	[a]	✕ ἈΥΝ
	48	φώρμης β			
17, 85	49	Σκυτοπολειταν.	ίστ.	a	✕ Γ
17, 86	50	Ταρσικῶν	ίστ.	a	✕ ΒΦ
17, 87	51	Βιβλίων	ίστ.	a	✕ ΒCN
17, 88	52	Λαδικηνῶν	ίστ.	a	✕ Β

17, 63, ἈΦΝ GER.: error. 17, 68, ΑΩ GER.: error. III, 31, φώρμης] φόρ. γ
GER. 17, 75, ΥΝ]Υ GER.: error. 17, 78, ΕΟ/ PLAT. 17, 86, ΒΥ GER.: error.

17, 89	53	Ταρσικ. Ἀλεξαν.	ίστ. α	✕ ΑΦ
	54	φώρμης γ		
17, 90	55	Σκυτοπολειτανῶν	ίστ. α	✕ ΒΦ
17, 91	56	Ταρσικῶν	ίστ. α	✕ ΒΕΝ
17, 92	57	Βιβλίων	ίστ. α	✕ Β
17, 93	58	Λαδικηνῶν	ίστ. α	✕ ΑΥΝ
17, 94	59	Ταρσικ. Ἀλεξ.	ίστ. α	✕ ΑΕΝ
	60	Ἄπερ ἀπὸ φώρμης τῆς προειρημέ-		
	61	νης καταδέεστέρα εἶεν καρακάλ.		
17, 95	62	φώρμης α	ίστ. α	✕ Α
17, 96	63	φώρμης β	ίστ. α	✕ ΥΝ
17, 97	64	φώρμης γ	ίστ. α	✕ Χ
17, 98	65	Ἀπὸ λίνου τραχέως εἰς χρήσιν		
	66	[τῶν] ἰδιωτῶν γυναικῶν		
	67	[φώρμ]ης α		
	68	[φώρμης] β		

COMMENT.

I wish to add a few remarks on the new information derived from this discovery. The greater part of the Plataian text is already known from other sources, as will be indicated below; still some interesting facts now come to light for the first time.

Col. I, 1–20 are almost completely lost and cannot be restored, and the two other copies of this part, from Karystos (*C.I.L.*, III, p. 821) and from Megara (Dittenberger, *Inscriptiones Graecae Septentrionales* n. 23, printed, but not published) are so very defective that they give no help.

Col. I, 21–41, of which the Plataian copy has preserved some fragments, correspond to ch. 16, 40–56. They treat of the pay of silk-workers but, in their imperfect condition, offer nothing of importance.

Col. I, 42–68, have corresponding lines in three other copies, the two just quoted and the Theban (*C.I.L.*, III, p. 823); but especially the first lines (wanting in Karystos) are much better in the Plataian copy, and the portions hitherto wanting are now supplied, though still presenting many difficulties: one such occurs after the line εἰς ἔργον δευτερεῖον τρεφομένῳ ✕ Κ, which is more or less preserved at Plataia, Megara and Thebes (the Karystian copy has a gap here). The Theban,

17, 93, N omitted by GER. III, 60, φώρμης] φέρ. γ GER. 17, 98, τραχυτ. GER. III, 66 with ἰδιωτῶν GER. concludes.

which is not at all reliable, does not even indicate it, but evidently what follows NHCXN belongs to 16, 58. The inscription is given thus:

MEGARA
ΠΕΡΙΦΟΥΛΛΩΝ

PLATAIA
////////ΔΩΝΩΝ

It must have been *περὶ Φουλλώνων*, though the Δ in the Plataian is quite evident, and the formation of the word also is objectionable; at least we should expect *φουλλωνίων* or *φουλλωνικῶν*. But the Megarian copy is evidently right, and the fuller's work corresponds to the argument of the chapter. That it treats especially of wool-articles has been stated already in my paper (*Hermes*, xxxv, p. 22) and it is not much to be wondered at that the Greek workman stumbled in rendering a Latin word. The number of letters wanting before ΔΩΝΩΝ is about ten, so that eight fit in very well leaving some vacant space at the beginning as is usual in the prescripts.

The following matters in 16, 58–66 of my edition are completed and bettered by the new copy, and deserve a special examination.

	PLATAIA	MEGARA	THEBES
16, 58	//////// περ χλανίδος τῶν εἰς παρα- //////// ν καινῆς ✕ N	περ χλανίδος τῶν καينῆς ✕ N	νῆς ✕ N ιδος τῶν εἰς παράστασιν καὶ
16, 58a	//////// ἥς τῶν εἰς παράδοσιν καιν. ✕ KE	ιαδο	ἰς παράδοσιν καινῆς ✕ KE

The first short word, which is wanting, may have been *γναφεῖ*; at least I cannot find a better one. The E in the second number in the Plataian copy is very uncertain and wanting in Lolling's transcription; nevertheless, I believe a trace of it can be seen in the squeeze and the Theban copy has it. Whether in this the end of the first article was placed above the beginning by the artisan himself or by the copyist's blunder, is not to be made out. The sense is clear: the fuller's pay for the cloths prepared by him for the market (*παράδοσιν* and *παράστασις* seem to signify the same, and render the Latin *negotatio*) is 40 *denarii* for the coat, 25 for the shirt.

16, 59 ἀσήμου ἐξ ἐρέας *τραχυτέρας* is filled up by the new copy: the Theban has only . . . *τραχυτέρων* ✕ K. Probably there *χλανίδος* is to be understood, and the article to be referred to the coat of rougher wool, and not ornamented.

16, 60 is also completed now. The *endromis* is a woolen over-coat, as also *raxana*, the latter corresponding in ch. 7, 60 to the *sagum*.

16, 61 and 62. The *δελματικομάφορτος*, composed of the *dalmatica*, a shirt without sleeves, and the *mafor*, a head-tippet, has already been yielded by the other copies (*C.I.L.*, III, p. 836, note).

16, 63. The *strictoria*, a shirt with sleeves, recurs in the Latin text **7, 56, 57, 58; 16, 24.** In the first place it is rendered by the Greek *σπίχη*.

16, 64 and 65. The substantives are supplied from the Plataian copy.

The rest of the chapter offers no considerable variation, excepting that in **16, 69** the number, and in **16, 72** the word *διπλῆς*, are now added.

Col. I, 69–71 *περὶ τειμῆς τῶν σιρικῶν* is perfectly preserved in the Karystian copy and does not offer any remarkable reading; that, instead of *λύουσιν*, we here have *λύουσι*[*ν*]*σιν* is perhaps only an error of the artisan.

Col. I, 72–76 *περὶ πορφύρας* is very important, but better preserved in the Karystian copy, and part of it in that of Megara. At Plataia only the first lines remain. That the second and third kind of purple are here introduced by the word *πορφύρας*, omitted in the Karystian copy, may be compared with **16, 89** where Karystos reads *απλίου λι. α*, Megara *πορφύρ. . . .* What is wanting of this chapter at Plataia and preserved in the Karystian copy, fills up, as is said, about half of the gap between the first column and the second; but as the purple chapter is not complete in the Karystian copy some more is to be added.

Col. II, 1–13 corresponds to a fragment dug up at Atalante, unedited, but copied for me some years ago by Mr. Lolling and mentioned in *Hermes*, XXXV, p. 19, n. 9. As the Atalante fragment is much damaged and the Plataian is in this part complete, I only mention the imperfection of the first, the place of which is now, for the first time, determined with certainty. The Plataian copy does not give the beginning of the linen chapter but does certainly give the second part of its first subdivision, since, as we have already shown, at the end of the first column at the utmost about ten lines remain for the linen. This important discovery shows that the linen tariff began with that of the flax, of which the prices are actually given after the weight. Here too as afterwards three different standards are established, the first probably without qualification, the second qualified as inferior to the first, the third as serving for home use by the women of the household (*ἰδιωτίδες ἢ φαμιλιαρικαί*). In each of these three standards three degrees are mentioned, so that a pound of first-rate flax amounts

to 1200, that of the commonest sort to 72 *denarii*. The place whence the flax comes was not taken as a basis for its value; the places mentioned in the following chapter refer, as is well known, to the weaving.

Col. II, 14–38 is also new, the first lines recurring, as the preceding, in the Atalante fragment. This second subdivision of the linen ware treats of the simple shirts, *στίχαι ἄσημοι*. It has the same three standards of three degrees each, as all these chapters, but the second class here is represented by the soldier shirts, *στίχαι στρατιωτικάι*.

Col. II, 39–68 respond to ch. 17, 1–17 taken from the Geronthraian copy; the beginning 39–47, wanting in this, is now supplied by the Plataian copy; the end defective in Plataia is supplied by the Geronthraian copy 17, 18–37. This passage regulates the prices of another sort of shirt, the dalmatica, distinguishing between woman's shirts which precede, and the cheaper men's shirts. It offers nothing of considerable interest; the first part also, though new, could have been almost made out by mere analogy. Only it may be observed, that at the beginning the dalmatica treated here is described as *ἄσημος*, as it should be.

Col. III, 1–12 treats in the same way of the linen *ἀναβολεύς*, the cloak. The beginning is missing, but as we have the whole passage from Geronthrai, ch. 17, 38–58, this is of no material importance.

Col. III, 13–41 follows the *faciale*. This passage too is only a second copy of 17, 59–72.

Col. III, 42–68 treats of the *caracallus* and corresponds to 17, 80–98. The Plataian copy has at the end a few more words than the Geronthrian, but they give nothing not otherwise known.

The last part of the third column and the slab joined to it, contained what we read on the first column of the Elateia copy, which treats of the *coxalia*, the *oraria* and certain *γυναικεῖα*, and after these, what in my edition is given, from another slab (of Geronthrai) as chapter 18, treating of the *κεραλοδέσματα*, the *σίνδονες*, the *τύλαι*, all belonging to linen ware.

THEODOR MOMMSEN.

Berlin.

REVIEWS AND NOTICES OF BOOKS.

EDMOND POTTIER. *Les Statuettes de terre cuite dans l'Antiquité* par M. EDMOND POTTIER, attaché au Musée du Louvre. Paris, 1891.

This is the first complete treatise on the subject of ancient terracottas, which have been the subject of so much discussion. It is a history of the coroplastic art, including its Oriental origins, the formation of archaic types, the development of the good Attic style into the blooming of the exquisite period which the author terms Tanagrean. Passing from Continental Greece M. Pottier studies the industry in the Kyrenaica, in Crimea, in Asia Minor with its centres at Smyrna and Myrina, returning through Sicily, Italy and even Roman Gaul. While giving respectful recognition to his predecessors M. Pottier expresses an individual opinion on all points. Hence the special interest of his chapters on the manufacture and destination of the figurines, where he expresses an eclectic opinion, to the effect that the worship of the gods and of the dead, the furnishing of the tombs, sacrifices to the *manes* or simple offerings, Elysean or simple genre subjects all contributed a share in the development of this branch of industry whose products were sometimes funerary, sometimes votive, and sometimes used as gifts.—HEUZEY, in *Chron. des Arts*, 1891, No. 4.

ORIENTAL ARCHÆOLOGY.

W. M. RAMSAY. *The historical geography of Asia Minor*. 8vo, pp. 495. Papers of the Royal Geographical Society, vol. iv. London, 1890; Murray.

In May 1886 the first sketch of this book was read before the Royal Geographical Society. In April 1888 the ms. was completed but was accidentally lost; not to be rewritten. All that could be recollected has been worked into Part I of this book, entitled *General principles*, while in Part II the provinces are taken up and notes on their history and antiquities are given, especially when they have any bearing on ancient geography.¹

¹Part I. GENERAL PRINCIPLES. CH. I. Hellenism and Orientalism. II. The "Royal Road." III. Beginning of the trade route. IV. The Eastern trade route. V. The Roman roads in Asia Minor. VI. The value of the Peutinger table, Ptolemy and the Itineraries, as geographical authorities. VII. The Byzantine roads. VIII. Change of site.

This is not the work on Asia Minor which Mr. Ramsay had expected and perhaps still hopes to publish. Limited time and space have prevented, and have given an extremely condensed form to this book. The condensation has been helped by two further factors: the writer has of deliberate purpose omitted to read what modern writers have said about Asia Minor; consequently references to them and discussions of their opinions, which often form large part of the bulk of such a work, are almost entirely absent. And, in the second place, he has abstained from repeating any fact well-known or which could be ascertained easily elsewhere, thus depriving himself of the pleasure of giving complete and consecutive pictures. All these reasons militate against literary form, as he remarks. The book is a mine for others to draw from; it is not a résumé of work hitherto done. The note struck is essentially personal from beginning to end. Mr. Ramsay is better qualified than any man to hold so independent a position, for his knowledge of ancient Asia Minor in all its phases—history, geography and art—has been gained by repeated yearly journeyings through the country. But perhaps the most striking part of his equipment is his discovery and use of new authorities—especially the Byzantine authors, *Acta Conciliorum* and *Acta Sanctorum*—and a far more critical use of those already known, such as the *Notitiae Episcopatum* and Strabo. He casts down some of the great idols, like the Peutinger table and Ptolemy, who had been too unconditionally followed; to them he prefers Strabo, Hierocles and the Itineraries. So generally does he found himself upon new authorities and so radically does he differ from hitherto recognized standards, that as he has well said “either my work is a mistake or the map of a great part of Asia Minor must be revolutionized.” This revolution will be complete, however, only when Mr. Ramsay, or some student who may follow in his footsteps, shall produce an *opus magnum* on ancient Asia Minor under all its aspects. It should not be imputed to him as a fault that the branches of topography and epigraphy have formed so large a portion of his published work to the detriment of

Part II. A SKETCH OF THE HISTORICAL GEOGRAPHY OF THE VARIOUS PROVINCES.

Introduction. Ch. A. Cities and Bishoprics of Byzantine Asia. B. Do. of Lydia. C. Do. of Phrygia. D. Do. of Hellespontus. E. Roman roads in the province Asia. F. Cities and bishoprics of Bithynia. G. The Byzantine military road. H. Cities and bishoprics of Galatia Salutaris. J. Roman roads in Galatia and Northern Phrygia. K. Cities and bishoprics of Galatia Prima. L. Roman roads from Anticyra to the East. M. Roman roads in Central Cappadocia. N. Roman roads over Anti-Tauros. O. Cities and bishoprics of Cappadocia. P. The Ponto-Cappadocian frontier. Q. Lycaonia and Tyanitis. R. The passes over Taurus. S. Roman roads in Lycaonia and Tyanitis. T. Cilicia Tracheia or Isauria. U. Cilicia. V. Cities and bishoprics of Pisidia. W. Pamphylia, Caria and Lycia. Addenda, Indexes and tables.

the descriptive, artistic and archæological elements which we know from his "Studies on Phrygian Art" and other papers, appeal strongly to his sympathies. A greater development of these branches would help to endue with reality and life his picture of Asia Minor. And yet as he well remarks: "If we want to understand the ancients, and especially the Greeks, we must breathe the same air that they did, and saturate ourselves with the same scenery and the same nature that wrought upon them. For this end topography is a necessary, though a humble, servant. The justification of Part II then is that if we are ever to understand the history of Asia Minor, we must know the places in which that history was transacted." No one can appreciate the force of this who has not realized from actual study that but an infinitesimal fraction of the sites known in the history of Asia Minor have been until recently identified, or even placed sometimes within fifty or a hundred miles of their proper location.

Mr. Ramsay has done more for the Byzantine period of the country than for the Roman: this was both most needed and easier, from the character of his sources, which were mainly ecclesiastical and relating to the period between Justinian and the Comneni. Among the several thousand places mentioned it is not always the larger that receive most space, as there is usually more obscurity surrounding a less conspicuous site that needs to be dispelled.

Mr. Ramsay's book is, then, very welcome. Only a few will be able to criticize it in detail. It fails to satisfy us, but only in the sense that we wish for much more.

A. L. F., JR.

CLASSICAL ARCHÆOLOGY.

P. MILLIET. *Études sur les premières périodes de la Céramique grecque.* 8vo, pp. xvi, 169. Paris, 1891; Giraudon.

These pages are by a young artist, who writes them as a thesis at the École du Louvre. From this point of view it is a very creditable volume. The author has utilized with considerable discrimination the best authorities, German and English as well as French. This is a characteristic quite uncommon in French writers of a previous generation, and is a sign that French scholarship is assuming a more cosmopolitan character. The thesis, which he supports, is that the different technical processes employed in the decoration of Greek vases were not discovered simultaneously, but were perpetuated by long tradition. Chronologically they may be considered as parallel rather than as successive. Hence he takes pains to show the continuance of early processes in later periods. The scope of the volume embraces (1) primitive pottery, (2) the Corinthian style, which he designates "quadruple polychromy" from the four colors employed, and (3)

black-figured vases. Each of these classes are sub-classified and the hypotheses concerning their origin, date, diffusion, etc. considered separately. The writer excels in his clear presentation of the subject and in his careful analysis; he would make a good lecturer to young students, although at times he seems burdened by the authority of others and again over dogmatic himself. A. M.

R. DARESTE, B. HAUSSOULLIER, TH. REINACH. *Recueil des inscriptions juridiques grecques, texte, traduction, commentaire*; premier fascicule. Paris, 1891; E. Leroux.

Though the French have distinguished themselves by scholarly and critical treatment of large numbers of Greek inscriptions, and have discovered and published perhaps more than the Germans for the past fifteen years, yet they have left to the Germans the gathering of these into systematic collections to which every one must refer, and where the best critical text may be had. The subject of the present notice marks a departure from previous habits, but in a limited way only and in a limited field. The work is to consist of three parts, of which the first lies before us, and confines itself to the sphere of juridical inscriptions, and within this sphere to such as are most important and most instructive for the end in view. This end is not primarily that of the epigraphist. The epigraphist may and will benefit by its results; but the collection is prepared especially for the student of jurisprudence, who wishes to pursue his researches beyond the limits of Roman law in the domain of antiquity, and may otherwise be repelled by ignorance of Greek, or by the difficulties of the subject-matter, or of the dialects. The editors have rightly believed that the inscriptions themselves are well worthy of the attention of the jurisconsult, and that to be widely studied they only need to be made accessible. To attain this purpose they have given a carefully edited text, embodying the labors of previous editors and their own, and to this they have added a translation expressed in language at once precise and juristic, and together with this a commentary upon the most important facts of the inscriptions treated. The work is therefore eminently practical and eminently useful, and is to be heartily recommended to the student of law or of antiquities. It is not less valuable to the beginner in epigraphy. It shows him how inscriptions are to be treated; it elucidates dark places by a perspicuous translation; it explains by judicious notes, and above all it masses together under one head, for comparison and study, a large number of inscriptions which otherwise must be sought for through widely scattered publications. Some of those which have been selected for this *fascicule* are the most difficult of their kind, and have exercised the ingenuity of epigraphists from all direc-

tions. We may instance the Lygdamis inscription of Halikarnassos, that of Ephesos relating especially to mortgages, and the Gortynian Code, which is deferred to a later *fascicule* in anticipation of the long promised edition of Comparetti based upon a new reading of the original by Halbherr.

The Lygdamis inscription is placed at the forefront of the volume, and, as its interest is historical as well as epigraphical and legal, it may serve to indicate the methods of the editors. About the middle of the fifth century B. C. Halikarnassos was under the tyranny of Lygdamis supported by Persian influence, but his peace was disturbed by a party of patriots who were striving to liberate the city from its tyrant and join the Athenian confederacy. Upon the testimony of Suidas it is believed that the poet Panyasis and the historian Herodotos were engaged in these attempts, and our editors suggest that the tyrant was ultimately slain, as a late inscription speaks of a descendant of the "Tyrannicides" at Halikarnassos. At all events, during the troubles, the patriotic faction was banished, and its property was confiscated and either held by the state in part, or sold at a low sum to the friends of Lygdamis with a guarantee by the state.

Later an accommodation was effected. The banished party was allowed to return, and a general agreement of amnesty was entered into, ratified under oath and deposited in the temple of Apollo. The editors cite as a parallel the situation of events in France in 1814, when the *émigrés* were restored to their country. Their confiscated property which had not been sold was returned to them; but in cases of sale already effected indemnity was granted to the original owners. At Halikarnassos no indemnity is mentioned; but the returned exiles were permitted to bring suit for property in the hands of others, and were granted a certain preference. The suit must be brought within eighteen months after the passage of the law, and the preference consisted in permission to take their oaths that the estates had belonged to them. Under the common law this right of evidentiary oath belonged to the defendant; now it was granted to the plaintiff for eighteen months, but ceased at the close of that period, in order to confine the suits to that limit as far as possible. At its expiration, suit could still be brought, but the plaintiff lost his preference, and the right of oath returned to the defendant. In the final decision of the case the recollection of the Recorders (Mnemonēs) who had been in office was to be decisive. It appears that these Recorders were charged with the administration, or at least the collection, of the proceeds of the properties under the sequester of the state. When this was removed, the Recorders in office were ordered to discontinue the transfer of these estates to their successors at the expiration of their term, thereby withdrawing the power of the state over them. There is a difficulty here which we think the editors have not dwelt upon sufficiently. The decree declares that the Recorders shall not

make the transfer to the Recorders represented by Apollonides (§ 2), and later (§ 4) that estates shall belong to those who held them under Apollonides, if they have not sold them since. It is clear that Apollonides and his fellow Recorders have been elected, but have not yet been inducted into office, while the term of eighteen months expires with their term of office. Two alternatives present themselves: either they are appointed for eighteen months, an unusual period, or their appointment precedes entrance upon office by six months, as we now know from Aristot. *Resp. Ath.* was the case for certain officers at Athens. Furthermore, the last clause of § 4 must be construed as referring to the period subsequent to the expiration of the term of eighteen months, thus following the keynote struck at the beginning of the paragraph. Accordingly, the discrepancy between §§ 2 and 4, noticed by Roberts (*Introduction*, p. 341), and sought to be avoided by Comparetti in another way, does not really exist. It may be proper to add that our editors assume that Lygdamis is still in possession of the citadel at Halikarnassos, and that his expulsion or death occurs at some later period. The addition made by the editors to the text by way of supplying lacunae is an important one at lines 7-8 where τ]δ Οἰκυλίω νε[ωπ]οι[δ] is read. This had already been proposed by Th. Reinach, *Revue des études grecques*, 1888, p. 27 seq., and accepted by Meister, *Berl. Philolog. Wochenschrift*, 1888, p. 1469.

The varied contents of the remainder of the *fascicule* may be seen from the following summary:—No. 2, Keos, relating to funerals; No. 3, Gambreion, on mourning; No. 4, Ephesos, on abolition of debts during the Mithridatic war; No. 5, likewise from Ephesos, relating to mortgages at the close of the war; No. 6, Mykonos, registration of dowers; No. 7, Tenos, registration of sales of real estate; No. 8, Attika, Lemnos, Amorgos, Syros, Naxos; a complete collection of mortgage inscriptions (ῥοι) amounting to 68; No. 9, Eretria, contract for draining a marsh; No. 10, Knidos, judgment rendered by Knidos in favor of Kalymna. Each of these inscriptions gives occasion for a considerable treatise upon the subjects contained in them. Especially valuable are those on dower and mortgages. No. 9 is of unusual interest just now when the American School is carrying on excavations at Eretria. The date of the inscription is attributed to the close of the fourth century or beginning of the third. Chairephanes, apparently not an Eretrian, enters into a contract with the Eretrians to drain a neighboring marsh called Ptechai, which rendered the district unwholesome then, as it is unwholesome now. The operations of Krates at Kopais in the time of Alexander (Strabo, ix. 2, 18) appear to have been its precedent, and certain similarities to the work of drainage of Kopais at the present time may be seen. At Eretria, as now at Kopais, open canals (ποταμοί) were to be constructed through the marsh and united at its lower

extremity. Here a reservoir was to be built, not greater than two stades square, with a gate leading out into a subterranean conduit as at Kopais. By means of this gate the water in spring could be gathered and used by the farmers in the vicinity for irrigating their lands. The conduit was to be furnished with shafts for air, and for entrance to the aqueduct below. Here a question of text occurs. The original editor of the inscription, Eustratiades (*Ephem. Arch.*, II. Series, 1869, p. 317) supplies the missing final letter of ΦΡΕΑΤΙΑ, as Ν; the present editors as Ξ, referring to Polybios (x. 28, 2), who is speaking of the distant regions of Parthia. The plural is right, if the *hyponomos* was of any considerable length. Such *hyponymoi* were habitually constructed with these shafts in Greece. The prehistoric tunnels from Kopais had them, as did that of Polykrates at Samos, and those in the vicinity of Athens, not to speak of others. We do not know whether this work was ever completed at Eretria or not; but among the names of the citizens of the town who took the oath to the contract for Eretria, it is interesting to find some that occur in inscriptions discovered among the graves at Eretria by the American School last winter.

A. C. MERRIAM.

ERNEST BABELON. *Les Rois de Syrie, d'Arménie et de la Commagène*. 8vo, pp. CCXXII–268; 30 heliotype plates. Paris, 1890; Rollin and Feuardent.

This is the second volume of the catalogue of coins of the Bibliothèque Nationale, and the first of its Greek coins. Vol. I was published in 1887 by M. H. Lavoix and treated of Mohammedan coins. This volume is a treatise both historical and numismatic. The largest part is naturally given to the dynasty of the Seleukidae which played so important a rôle through the entire East and whose coins served as types to all the princes of Further and Central Asia—Parthians, Bactrians, Indo-Parthians and Indo-Scythians. Apollo on the omphalos, the symbolic anchor, the Victory, Tyche or Fortune, are types which are found as far as the centre of India. The volume is divided into two main sections, the Catalogue proper and the Introduction: the latter will create most interest, since it is addressed as well to the historian, the archæologist and the chronologist, as to the numismatist; and the information here given is the fruit of vast and accurate research. But little will remain to be told of the Seleukidae unless there be new discoveries. For some time M. Babelon has been making himself a specialist in this field. Some of the interesting topics treated with especial care are: the coins of Seleukos I when only Satrap of Babylon; the horned types; the origin of the omphalos; the era of the Seleukidae; the elaborate series of Antiochos IV Epiphanes, including the

independent series of the cities of Egypt and Asia. After Demetrios II Nicator, the types being usually the same, especial attention is paid to coining *ateliers*, to chronology, monograms, weight and system of coinage. The Kings of Armenia and Commagene occupy only a small space, but all possible use has been made of existing material.

The catalogue consists of a careful description of the seventeen hundred pieces in the Cabinet de France, among which are a number of extremely rare pieces, especially of Seleukos I, Antiochos III, Demetrios I and II, Tryphon, etc. Genealogical tables, two tables of monograms and an index complete a masterly work which greatly honors French scholarship.—E. DROUIN in *Rev. Arch.*, March-April, 1891.

VERRALL and HARRISON. *Mythology and Monuments of Ancient Athens ; being a translation of a portion of the "Attica" of Pausanias by MARGARET DE G. VERRALL, with introductory essay and archaeological commentary by JANE E. HARRISON.* 8vo. London, 1890 ; Macmillan.

This work is not intended as a complete description of the monuments of ancient Athens ; these are subordinated to mythology. Miss Harrison's "aim has been to discuss in full detail every topographical point that could bear upon mythology, and for the sake of completeness, to touch, but very briefly, on such non-mythological monuments as were either noted by Pausanias or certainly existed in his day." Accordingly the book consists, first of a description of ancient Athens, based upon all available evidence, literary, epigraphical, and monumental ; and, secondly, of copious mythological and mythographical discussions interwoven with the foregoing, besides a separate introductory essay on the Mythology of Athenian Local Cults. For the first part her work is mainly that of a compiler, besides appropriating unpublished views of Dr. Dörpfeld. As much of the information given had been previously inaccessible, this book will be indispensable to English-speaking students of Athenian antiquities. It is, however, incomplete, for Miss Harrison's principle in dealing with the monuments seems to have been to record pretty fully the most recent discoveries and to touch rather lightly on points adequately dealt with in older hand-books. While her information of this sort may be generally trusted, in treating of epigraphical and literary evidence Miss Harrison is a much less trustworthy guide, and this part of her work needs searching revision, as could easily be shown by numerous examples. In the field of mythology her most original contribution consists of three illustrations of the theory "that in many, even the large majority of cases, *ritual practice misunderstood* explains the elaboration of myth." I regret

to say that in the handling of this theory I find no approach to scientific rigour; the results command conviction as little as the once fashionable vagaries of the devotees of the Dawn. The three cases elaborated are the myths of Erichthonios and Erigone and the story of Kephalos and Prokris. Miss Harrison is at her best in the interpretation and appraisal of works of ancient art. While her translations from the Greek are often incorrect, Mrs. Verrall's work on the other hand, is scholarly and skilful. —F. B. TARBELL in the *Classical Review*, Nov., 1890.

J. HENRY MIDDLETON. *The Engraved Gems of Classical Times. With a Catalogue of the Gems in the Fitzwilliam Museum.* Cambridge, 1891; University Press.

The author of this most instructive volume very modestly says in his preface, "I have attempted to give a brief account of the engraved gems and other forms of signet which were used by the chief classical races of ancient times. The book is intended for the general use of students of archæology, and has been written with the hope that it may in some cases lead the reader to a more detailed and practical study of this most fascinating subject." The book is of the nature of a treatise on ancient gems. It is strong in the use made of literary evidence from classical writers, in the analytical description of the various kinds of gems and their uses, in the exposition of the technique of gem engraving and in the cataloguing of the materials used for ancient gems. It is not so strong in the chapters which treat the subject historically. This makes us feel how desirable it is that extensive collections should be made of the impressions of gems from many museums, and that these should be carefully studied from the historical point of view, so that racial and local peculiarities might be brought out with greater clearness, and the successive changes in style and subject be more distinctly traced. But to any one who may undertake this work it will be a great help and stimulus to have before him a treatise like this by so careful a scholar and accurate observer as Prof. Middleton. For the collector and museum director also there are many valuable hints, which are helpful in distinguishing between genuinely antique and more modern reproductions of classical gems, as also toward the difficult task of accurate description and classification.—A. M.

SALOMON REINACH. *Bibliothèque des monuments figurés Grecs et Romains. Vol. II. Peintures des Vases Antiques recueillies par Millin et Millingen.* Paris, 1890; Firmin-Didot.

This is the second volume of M. Reinach's great *corpus* of ancient monuments, the first having been a reëdition of Le Bas' *Voyage Archéologique*. This volume contains reproductions of the 150 plates of ancient vases pub-

lished in Millin's two folio volumes, *Peintures de Vases Antiques vulgairement appelés Étrusques*, and of the 63 plates in Millingen's *Peintures antiques et inédites de vases Grecs*. The reproductions are of good size, quite clear and distinct. M. Reinach writes an introduction of 142 pages in which he analyzes, or occasionally reproduces verbatim, the text of the original authors, and gives every fact of permanent value that has been stated by them. Not only is the owner of this volume practically as well off as if he had the costly original volumes, but has the following advantages: M. Reinach often corrects inaccuracies of Millin's drawings; he also discusses the interpretation of the subjects from the modern point of view, traces as far as possible the history of each vase, and gives a list of other references to and reproductions of each vase. All the new information contained in the introduction is expressed in a direct and simple style which adds to its usefulness. The author gives everywhere traces of wide reading.—W. M. RAMSAY in the *Classical Review*, March, 1891.

F. HAVERFIELD. *Ephemeris Epigraphica*, vol. VII. *Additamenta ad Corpus Vol. VII.*

To Mr. Haverfield has been entrusted, by the Berlin authorities, the task of editing the Latin inscriptions found in Britain since the issuing of the seventh volume of the *Corpus* some fifteen years ago. Such a piece of work was of the utmost necessity in Great Britain, whose ancient epigraphic records have never been systematically and scientifically studied and are in a state of chaos. The present volume contains some 380 inscriptions, most of them without striking interest or value: the most important group is undoubtedly that which includes those found since 1883 in the walls of Chester, already edited in 1888 in a most blundering manner by Mr. de Gray Birch. They are all of a good period, none probably later than 200 A. D., and are in many cases inscribed below sepulchral reliefs of considerable interest. They refer for the most part to soldiers of the 20th legion, and must once have stood in the legionary burying-place. For the manner in which Mr. Haverfield has accomplished his task we have nothing but praise.—H. F. PELHAM, in the *Classical Review*, Feb., 1891.

FERDINAND LABAN. *Der Gemüths Ausdruck des Antinous. Ein Jahrhundert angewandter Psychologie auf dem Gebiete der antiken Plastik.* 8vo, pp. 92. W. Spemann; Berlin, 1891.

Ancient sculpture, although portraying a wide range of emotion and character, nevertheless makes considerable demand upon the spectator's fancy. The product of the sculptor's hand is more or less indefinite, hence the interpretations may differ widely. Impressed with the variations in

the interpretation of the statues of Antinous, the author of this volume has gathered the judgments of some fifty writers from Winckelmann (1717-1768) to Dietrickson (1834-). These he has arranged chronologically and finds that they may be divided into three general groups. First are the optimists, born before 1774 and expressing their judgments earlier than 1816. To this class belong Winckelmann, Meyer, Goethe, Adler, Heinse, Bromley, Levezow, Gruber, Beck. In general the judgments of these men presuppose the happiness and joy of living. Even the melancholy of the Antinous seems soft and sweet. Following this group are found two parallel but different classes of thinkers, the pessimistic-idealists and the realists. The former class consists of men like Schnaase, Braun, Stahr, Wieseler, Kugler and Carrière, who were born between the years 1798 and 1817, and expressed their judgments between 1843 and 1866. They see in the Antinous an expression of "Weltschmerz," a portion of the universal sorrow in life. The realistic tendency is represented in the judgments of K. O. Müller, Waagen, Friedländer, Burckhardt, Brunn, Heyse, Michaelis, Lübke and Helbig. These men in general are indifferent to the personal impression made by the object, and are interested rather in analysis, building up a general interpretation of an object through the consideration of details. Each of these groups of judgments evinces the changing spirit of the times. Thus from the wilderness of individual judgments we may secure what may be called a composite judgment. It may not present to our minds the sharp outline of the individual judgment, but it comes to us with greater authority. We have accustomed ourselves, by the historic method in archæology, to judge of objects through a series of antecedent and subsequent forms. This little volume is an application of the same method to interpretation.

A. M.

CHRISTIAN ARCHÆOLOGY.

BARBIER DE MONTAULT. *Traité d'Iconographie Chrétienne*. Orné de 39 planches par M. Henri Nodet, architecte. 2 vol., 8vo. Vivès; Paris, 1890.

This work is the first general treatise of any importance on the subject of Christian iconography from the artistic standpoint. It is not only a condensation of his predecessors' work but the result of personal labors of over thirty years. After an introduction treating of general iconographic symbols like the nimbus, the crown, costume, *etc.*, the following subjects are studied in successive chapters: *Time* (zodiac, seasons, calendars, *etc.*); *Nature* (sun, moon, elements, *etc.*); *Man* (soul, body, ages, wheel of fortune, death, *etc.*); *Virtues and Vices*; *Triumphs*; the *Sacraments*; the *Sciences, Arts and Trades*; *Society* (the Church, religious orders, *etc.*). A second

series of chapters treats of Angels and Devils, of God, of Christ, the Virgin, the Apostles, Evangelists, Saints and, finally, heresies.

The examples selected give proof of the author's great erudition and his work is one that will be indispensable to the student of Christian art.—EUG. MÜNTZ, in *Chron. des Arts*, 1891, No. 15. Cf. L. C[ROSNIER], in *Rev. Art Chrét.*, 1891, No. 1.

F. X. KRAUS. *Die Christliche Inschriften der Rheinlande*. Fol. Mohr; Freiburg-i. B., 1890-91.

Prof. Kraus here publishes a complete collection of the Christian inscriptions of the Rhenish province anterior to the second half of the VIII cent. They number about 300: nearly all are funerary and two-thirds of them come from Trèves (Germ. Trier). This latter fact is explained by the fact that Trèves was made the residence of some of the first Christian emperors in order to more easily fight the barbarians. As M. Le Blant observes, the development of Christianity in Trèves is due more to that cause than to evangelization, for the greater part of the inscriptions relate to persons of Latin race who took up residence there on account of the presence of the imperial court. On the contrary everywhere else Germanic names preponderate. Prof. Kraus has not confined himself to inscriptions but has included in his work all that constitutes the *instrumentum* of Christian epigraphy, leading thus to the publication of a number of monuments—rings, seals, intagli, spoons, etc. It is to be regretted that the author has limited the size of the public that can make use of his book by omitting all transcription of the inscriptions and explanatory notes. Typographically speaking the book is a model: almost all the inscriptions are given in fac-simile.—E. J. ESPERANDIEU, in *Rev. Art Chrét.*, 1891, No. 3.

HENRI-RENÉ D'ALLEMAGNE. *Histoire du Luminaire depuis l'époque Romaine jusqu'au XIX^e siècle*. Fol., p. vi, 702. Picard; Paris, 1891.

The subject of this book is novel and interesting. Lighting has held from the beginning in Christian worship an important place. The materials are drawn equally from monuments, existing in churches and in collections, and from manuscripts and print. This sumptuous volume is illustrated by 500 engravings and 80 colored plates. The first chapters, somewhat perfunctory in character, relate to antiquity. For the early Christian period the author makes use of texts, most of which had already been collected by Cahier and Martin and by Labarte. These he does not in every case interpret correctly: he also shares the delusion about the panic of the year 1000 which has been proved of late to be imaginary:

After this period the author enters more fully into his subject. The XI cent. is rather meagre, but the XII cent. is quite prolific especially along the Rhine. That France shared in the revival is shown by works at Reims (S. Remi) and Cluny. The candlesticks, sconces or lanterns, chandeliers, and coronae or suspended crowns, remain usually the same in the XIII as in the XII cent. But new forms begin to appear in the XIV cent., and from that time onward a greater number of specimens have been preserved. The XV cent. was especially inventive; and among other novelties are the torch chandelier and the helix chandelier. Too often the Renaissance was led to forget the true purpose of light-bearing objects and to be carried away by love of decoration.

Throughout the book there is an abundance of material and information; the illustrations are copious and there is a good index.—MAURICE PROU, in *Rev. Art Chrét.*, 1891, No. 3.

L. DE FARCY. *La Broderie du XI^e Siècle jusqu'à nos jours, d'après des spécimens authentiques et les anciens inventaires.* Belhomme; Angers, 1890.

The first fasciculus of this work has appeared, consisting of 48 folio pages and 64 phototype plates, and forming about one half of the entire work. While tapestry has been carefully studied, the subject of embroidery has been neglected, although this branch of the industrial art follows the same laws of development, has the same archæological characteristics, the same laws of color, and illustrates similar subjects. The author has been known for years as a specialist in this field and treats it with thorough mastery. It is only recently that such a work could have been safely attempted, for museums have been collecting embroideries to any extent only during some twenty years, and the inventories which the author uses as his second main source of information have been made known chiefly by modern publications. Especial attention is paid to technical processes, of which the author enumerates about thirty, and to the division also according to different kinds of design and ornamentation. In connection with this section there is an historical sketch of the subject. M. de Farcy is interested in the modern revival of the art by the study of ancient models which such books as his encourage.—JULES HELBIG, in *Rev. Art Chrét.*, 1891, No. 1.

W. A. NEUMANN. *Der Reliquienschatz des Hauses Braunschweig-Lüneburg.* Fol., p. 368. Holder; Wein, 1891.

This monumental work is worthy of the magnificent collection now belonging to the house of Brunswick-Lüneburg, which was the treasure of the Kings of Hanover. Dr. Neumaun, to whom the task of drawing

up the catalogue was intrusted, was well qualified to accomplish it as he adds to his ability as an archæologist the acquirements of a liturgist and theologian. It is rather strange that in these days such a sumptuous book should be illustrated by superb engravings in black and white in the style of the XVIII century, which have, it is true, the advantage of perfect exactitude as they are taken directly from photographs. These engravings number 325. Of the objects which they represent there are at least thirty of capital importance, of the highest artistic value, in the most perfect preservation, of unimpeachable authenticity: crosses, portable altars, reliquaries, bindings, liturgical objects. Above all others towers the famous piece signed *Eilbertus Coloniensis me fecit*. No. 27 is interesting because, though barbarous, it certainly illustrates the passage from the *cloisonné* to the *champlevé* work. First among the rest are the two crosses called the *Welfen Kreuz* and the *Velletri Kreuz*, in both of which an enamelled cross of very early date is enclosed in an elaborate frame of Western mediæval workmanship: the enamels have been repeatedly studied and cannot be securely pronounced Eastern or Western. Of nearly equal interest is the *Stand Kreuz* with its foot of three leopards. Among the rest there are several domical reliquaries, the silver repoussé plaque of Demetrius and that of Duke Otho.

The work presents the treasures of the collection in a worthy manner, and is a most important contribution to our knowledge of this branch of Christian art.—F. DE MÉLY, in *Rev. Art Chrét.*, 1891, No. 2.

LA COLLECTION SPITZER. Fol. Quantin; Paris, 1890.

This is an incomparable work from the character both of the collection itself and the men who have illustrated it. M. Spitzer planned, shortly before his death, to issue a superb catalogue in seven volumes. Of these two have appeared. The authorities selected to carry out the work were MM. Froehner, Darcel, Palustre, Eug. Müntz and Em. Molinier, all authorities in their specialties. The first volume includes the Antiques, Ivories, gold and silver work and Tapestries, illustrated with 63 folio plates and many insets. The antiques, consisting mainly of Greek terracottas and Etruscan bronzes, are catalogued by the careful hand of M. Froehner. M. Darcel had charge of the ivories. In cataloguing the 171 numbers, he takes occasion to summarize the history of ivory carving from the early Middle Ages down to the XVII century, and each piece is examined in its chronological order. The classes of objects are numerous—coffers, croziers, horns, diptychs and book-covers, mirror-boxes, combs and statues of the Virgin of which there are a number of fine examples, especially of the XIV–XVI centuries. The section of the collection whose wealth is incomparable is that of the works in gold and silver and enamel. Por-

table altars, paxes, chalices, reliquaries, ciboria, bible-covers, crosses, censers, flabella, clasps, ostensoria, statuettes—these are some of the classes represented. The writer holds rightly to three western schools—France, the Rhine, and Germany, but limits too much the centres of manufacture. He does not perhaps know sufficiently well the most stupendous collection of enamelled works in existence—that of the treasury of the Kings of Hanover.

The section on Tapestry is entrusted to M. Müntz, who excels in condensation. It is a pleasure to follow him in his rapid description of the tapestries of the Middle Ages and the Renaissance: M. Spitzer allowed in his collection only irreproachable specimens, twenty-three in number, eight of which are reproduced in chromo in a most wonderful manner.—F. DE MÉLY, in *Rev. Art Chrét.*, 1890, No. 6; 1891, No. 1.

JULES HELBIG. *La sculpture et les arts plastiques au pays de Liège et sur les bords de la Meuse*. Deuxième édition. Fol. Bruges, 1890.

This is a study of the history of sculpture in one of the most artistically fruitful parts of Flanders, which stood between the schools of Northern France and of Rhenish Germany. Not only the existing monuments, but manuscript sources of information, have been utilized and the work is that of a thorough specialist. The first chapter treats of the Carolingian period, especially its sculptures in metal and ivory, and the second studies the Romanesque period from about 1000 to 1229, when art gradually develops out of barbarism. Chaps. III to V cover the history of sculpture from the XIII to the beginning of the XVI cent., the most brilliant period in the artistic annals of the province of Liège, and one which the writer makes known to us by a multitude of works, especial attention being paid to sepulchral monuments. In the early part of this period Hugo d'Oignies, and in the later, Hennequin or Jean de Liège, the official sculptor of Charles V, stand out with especial prominence. After studying the works of the Renaissance M. Helbig brings his study as far as the XVIII cent. The illustrations are numerous, varied and good.—EUG. MÜNTZ, in *Chron. des Arts*, 1891, No. 10.

EM. MOLINIER. *Venise et ses arts décoratifs, ses musées et ses collections*. Fol. Librairie de l'Art; Paris, 1889.

This book has not only an expository but a practical and didactic object. M. Molinier seeks, by the reproduction of what he considers beautiful works of art, to influence the industries of the present day. The title of the book is rather misleading, for it is not a description of the monuments of Venice and their contents, but is based entirely on the

Carrer Museum. It is divided into the following sections: bronze, precious metals, ceramics, glass-ware, marquetry and wood sculpture, iron-work, tissues and manuscripts. Each chapter is in the form of a lecture, pleasantly told: a larger share than the average is given to ceramics, in which the author is an expert, and here precisely is a weak point, very little of genuine Venetian work being given. The illustrations are good and number 207. The book gives an interesting glimpse of the development of the smaller arts in Venice.—F. DE MÉLY, in the *Rev. Art Chrét.*, 1891, No. 3.

RENAISSANCE.

LUCA BELTRAMI. *Il Codice di Leonardo da Vinci nella biblioteca del principe Trivulzio in Milano. Trascritto e annotato.* Fol., with 94 plates. Dumolard; Milan, 1891.

This manuscript is reproduced in fac-simile, with the transcription placed opposite, and is therefore a definitive edition of a very interesting ms. of Leonardo. It formerly belonged to the Arconati collection and was the only one not given by Arconati to the Ambrosian library: it passed into the collection of Prince Trivulzio. The contents interest history, linguistics, philosophy, architecture, chemistry, mechanics, optics and acoustics. It contains drawings of machines, grotesque heads, studies in architecture and for coats-of-arms: but the greater part is formed of long lists of words arranged in four or five columns like a skeleton dictionary of synonyms. This publication increases the desire for the "Codice Atlantico" promised by the Academy of the Lincei.—EUG. MÜNTZ, in *Chron. des Arts*, 1891, No. 12.

ARCHÆOLOGICAL NEWS.

SUMMARY OF RECENT DISCOVERIES AND INVESTIGATIONS.

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AFRICA.

EGYPT.

THE PRESERVATION OF THE MONUMENTS OF ANCIENT EGYPT.—The following letter has been received by the Earl of Wharnccliffe, in answer to the memorial concerning the ancient monuments of Egypt presented by him to the Marquis of Salisbury:

“Foreign Office, Dec. 25, 1890.

“My Lord,—I am directed by the Marquis of Salisbury to acknowledge the receipt of your letter of the 10th inst., and to inform you that the memorial enclosed therein, praying for the appointment of an official inspector with a view to the better preservation of the ancient monuments in Egypt, will be forwarded to Her Majesty’s Agent and Consul-General at Cairo for presentation to the Egyptian Government.

“Sir E. Baring will be instructed to state that Her Majesty’s Government consider the question of the nationality of the official to be appointed to such a post to be a matter which lies wholly within the competence of the Egyptian Government, and that their only desire is that adequate steps should be taken to preserve the monuments from further destruction or mutilation.

“Sir E. Baring will also explain to the Egyptian Government how the memorial came to be signed in two different forms.

“P. W. CURRIE.”

• We further quote the following from the telegraphic correspondent of *The Times*:

“Cairo, Jan. 4.

“The Egyptian Government have decided to appoint two European inspectors to insure the preservation of ancient monuments. The inspection staff of the Museum is also to be considerably increased.”

“Cairo, Jan. 5.

“The Egyptian Government has just approved the following regulations for private persons and scientific societies desiring to excavate for antiquities :

“All demands are to be addressed to the Public Works Ministry, which can accept or reject them as it pleases. When permission to excavate is accorded, all unique objects found will belong, of right, to the Museum, disputes being settled by a commission of three persons, nominated, one by the excavator, one by the director of the Museum, and one by the Minister of Public Works. The surplus will then be handed to the excavator on the conditions that the greater part is given to some public museum, and that a description of the articles found is published within two years. If these conditions are not accepted, the surplus will be equally divided between the excavator and the Government. Gold and silver objects in all cases are to be equally divided, on the basis of the intrinsic value of the articles.”—*Academy*, Jan. 10, 1891.

EUROPEAN INSPECTORS AND THE PRESERVATION OF KARNAK.—The Society for Preserving the Monuments of Ancient Egypt reports that the efforts of those who lately addressed Lord Salisbury in hopes of procuring a proper official supervision of the monuments have been successful. The Society now intends to promote preservation of the temples themselves, for which a subscription was started two years ago, and, to this end, has obtained leave from the Egyptian Government to put the temple at Karnak in repair. Accordingly the Society has, to begin with, offered to hand over 500*L.*, and makes a further special appeal to antiquaries and art lovers for funds to carry on this incomparably important work. Without aid of the kind in view a large number of the columns of the temple must fall, and thus irreparably injure other parts of the building. 3,000*L.* is required to put the remains in an efficient state of repair. Col. Ross, in consultation with Grant Bey, of the Public Buildings Department, Egypt, is to be entrusted with this duty.—*Athenæum*, Feb. 14.

EXCAVATION IN EGYPT.—Mr. Petrie writes from Mêdûn (Jan. 10): “An important step has lately been taken in recognition of scientific work which will, I am sure, be gratifying to readers of the *Academy*. Some weeks ago an obstructive party in Egypt succeeded in forcing forward an entirely new regulation. By this the government were to take from excavators, firstly,

all that was unique, and then half of the remainder. These terms would practically stop archæological work, which always needs much unremunerative expenditure; as on such conditions a loss would only be avoided when roughly plundering rich cemeteries. As I was waiting to commence work, I at once protested; and the subject was reconsidered. Sir Evelyn Baring's attention having been called to it, he made active representations on the subject; and, in consequence of his care and intervention, the cordial co-operation of the Anglo-Egyptian officials, and the goodwill of Riaz Pasha, a reasonable arrangement has been passed by the ministry, on trial for two years.

"The essential terms are that the Ministry of Public Works will authorize suitable applications. That the Ghizeh Museum may take all objects found that are *sans pareil* in that collection; the decision, if disputed, to be by arbitration, the Public Works turning the scale. That all the remainder belongs to the finder if he will present the major part to public museums, and publish his results in two years; if he will not do so, the government require half of the remainder. Gold and silver remain as before, half to the finder, by intrinsic value.¹ Thus a clear preference is given to scientific exploration on behalf of public museums. This is not a personal or a national gain, but a benefit to Egyptology in all countries; and I am sure that it will be a satisfaction that this liberal policy should have been brought about by English influence and work. There has been enough of exclusive action in past time to make this public-spirited and impartial settlement a welcome change.

"In consequence of the previously impossible terms, I am only just beginning on this most interesting place. I have made a complete facsimile copy, full size, of the tombs, about eight hundred square feet, and colored copies of special signs. We learn much from these very early sculptures. *An* is not an obelisk, but an octagonal fluted column, with square tenon on top. *Aa* is not a spear, but a papyrus column with bell top and a long tenon at the end. *Hotep* is a reed-mat in plain view, with a dish of offerings upon it, in elevation. *Ma* (sickle) always has teeth inserted, like the flint-saw sickles which I found. *Men* is the gaming-board, of 3 × 10 squares, in plain view; with a row of ten pieces, alternately tall and short, in elevation on the top. *Menkh* is a chisel in a wooden handle. *Net*, supposed to be a bag, and to mean 'chancellor,' is an object suspended from a string of red and green beads. The object appears to be a green cylinder with gold end-caps, and if so it means 'sealbearer.' *Shed* is a raw-stripped

¹ I may say that I always give my workmen the whole intrinsic value of what they find, as the only true way of securing it; so that finding precious metals entails a loss of half the value to me, without any gain.

skin, rolled up, fur out, with raw red flaps of the limbs and neck showing at the ends, and tied round ends and middle. *Ur* is the common wagtail. Many other points of great interest occur in the splendidly carved and painted tomb of Rahotep. But, owing to the lack of inspection in this country, this tomb has been left open of late years, and every face within reach is smashed. The pyramid of Rikka has disappeared altogether; and the pyramid of Medum has lost some 100,000 tons in the last half century, and is still the quarry of the neighborhood. Perhaps it will hardly be believed that the anti-English party here are determinedly opposing the appointment of inspectors. The monuments may go to pieces if some miserable political end can be gained. We may hope that, the excavation difficulty being settled, the inspection question will be likewise firmly solved.

"I bought in Cairo the oldest weight known, bearing the name of Khufu, It is marked 'ten units,' weighs 2060 grains, and so shows the Aeginetan standard at an earlier date than any example of the Egyptian *Kat*."—W. M. FLINDERS PETRIE, in *Academy*, Jan. 24.

THE ANCIENT EGYPTIAN MONUMENTS.—Mr. Wallis writes from Luxor, Jan. 13, 1891: "The announcement in the *Academy* of December 27, that a numerously signed memorial has been presented to Lord Salisbury, praying for the appointment of an official inspector of the Egyptian monuments, has given great satisfaction to those of us here who are interested in the subject. It cannot be too strongly impressed on archæologists and lovers of art that if the monuments still remaining are to be preserved, the initiative must be taken by the Foreign Secretary. Whatever he orders will be carried out. But unless he gives precise and definite instructions nothing practical will be accomplished. It might have been thought that the agitation of last autumn would have stirred the Cairo officials to action. It served no other end than to promote a certain amount of aimless discussion. The suggestions of members of the Antiquities Committee like Gen. Grenfell and Col. Ross, who to a knowledge of the subject unite also an earnest desire to save the monuments, were invariably vetoed by the obstructive majority. If Gen. Grenfell resigns his membership of the committee, as he has stated he will, he would certainly be fully justified in doing so.

"Sometimes, however, even on this question, the opposition finds itself rather sharply pulled up, as happened two or three weeks ago in the case of Mr. Flinders Petrie's excavations. He came out to Egypt last November on the understanding that he was to work at the Pyramid of Médûn under the same conditions that he excavated last year at Hawara. After he left Cairo new rules were made by the committee, of such a nature that Mr. Petrie, on learning them, decided to abandon his work, and dis-

charged his men. This was what the majority of the committee desired. The fact of his being an Englishman, and a very successful excavator, greatly esteemed at home and with a European reputation, offered a rare opportunity for displaying their animus. One member of the committee went so far as to say that 'Mr. Petrie must be made to understand that there is no room for him in Egypt.' Fortunately, the matter came to the ears of Sir Evelyn Baring, who summoned Mr. Petrie to Cairo, ordered the committee to abolish their late regulations, and in consultation with Mr. Petrie framed new ones, which will be decidedly more favorable to him than those under which he has hitherto conducted his operations.

"This incident will explain to those interested in the preservation of ancient monuments how matters really stand here. They are sufficiently influential to demand of Lord Salisbury that the Egyptian temples be placed under efficient inspection. This can only be done by the department of public works. And when Sir Evelyn Baring informs Sir Colin Moncrieff and Col. Ross that the responsibility of preservation rests with them, unhampered with any conditions, we may entertain a reasonable hope that what yet remains of the monuments will not be lost.

"As to their present condition, I notice a marked deterioration since last I visited Upper Egypt, three years ago. The natural decay has gone on to an alarming extent. Fine passages of sculpture, where the stone is saturated with nitre, can be obliterated by the pressure of the finger; and this might have been prevented if the stone had been properly washed when it was first uncovered. It is true that some tombs are shut in with doors; but the temples are unenclosed, and the natives have free access to them, which means that the decoration is at their mercy, the same as previously. In places where decayed stone ought to have been cut away and supplied with new, there is simply a plastering of Nile mud mixed with chopped straw. In short, the evidences of decay and wreckage in all directions is simply heart-breaking.

"It cannot be otherwise under the present system. In the temperate climate of Western Europe it would be physically impossible for one man to direct a museum and overlook monuments extending over nearly a thousand miles. Consequently, for all purposes of practical study the museum is next to valueless, and the monuments are passing away before our eyes. Whether the museum of Ghizeh shall fulfil the function it might for this generation, and whether the monuments are to be preserved for future generations, is in the hands of the educated public of England."—HENRY WALLIS, in *Academy*, Jan. 31.

PROGRESS OF EGYPT IN THE DESTRUCTION OF ITS ANCIENT MONUMENTS.—Mr. Sayce writes from Assiout, Jan. 24, 1891: "A somewhat slow voyage up the Nile in a dahabiah this winter enables me to give a fuller report

on the progress made during the past year in the destruction of the ancient monuments of Egypt than is possible for those who travel by steamer. Mr. Wilbour's dahabiah has accompanied mine, and we have stopped at a good many places between Cairo and Siût. I find that the interesting tomb at *Kom el-Ahhmar*, near Minieh, the only one left out of the many described by Lepsius and other earlier Egyptologists, has shared the fate of the tombs of Beni-Hassan and El-Bersheh. Portions of the inscriptions on the walls, and even the ceiling, have been cut out or hacked off, and the rest of the tomb has been wantonly and elaborately defaced; hours must have been spent in hacking the inscriptions and paintings with some metal instrument in order to render them illegible.

"The tombs and ancient quarries towards the southern end of *Gebel Abu Feda*, which, when I last visited the spot eight years ago, were only partially destroyed, have now been almost completely blasted away. The work of destruction is still going on merrily among the old tombs of *El-Kharayyib*. A little to the south of the latter are the cartouches of Seti II discovered by Miss Edwards. A year or two ago they were saved by Col. Ross from the quarrymen who were about to blast them away; but his interference has produced but a momentary effect, as I find that considerable portions of the monument have been destroyed since I saw it last March.

"One of the tombs at *Tel el-Amarna*, and one only, has been placed under lock and key, now that, along with its neighbors, it has been irretrievably ruined. The two 'guardians' appointed to look after the tombs live at Haggi Qandil, two miles off. They are natives of the place, and their efficiency may be judged of from the fact that pieces of inscribed stone, freshly cut out of the walls of the tombs, were offered to us for sale under their eyes. Anyone, indeed, who is practically acquainted with Upper Egypt well knows that the principal use of a native 'guardian' is to draw a small salary from the government, supplemented by *bakshish* from visitors. For the protection of the monuments he does little, unless under the constant supervision of a European inspector."—A. H. SAYCE, in *Academy*, Feb. 14.

THE ARCHÆOLOGICAL SURVEY.—Miss Edwards gave at the last meeting of the Egypt Exploration Fund (Feb. 20) the following report on the Archaeological Survey actually in progress, conducted by Mr. Percy E. Newberry and Mr. George Fraser. These gentlemen had taken up their abode in one of the unpainted rock-cut sepulchres of Beni-Hassan, and were actively engaged in copying, tracing, and photographing the scenes and inscriptions which enriched the more famous of these historic tombs. They had already cleared out the accumulated rubbish of centuries, thus restoring the admirable proportions of these excavated chambers, and bringing to light inscriptions which had never yet been read. Mr. Fraser, having

cleared out several of the tomb-pits, and discovered in one of them evidences of an original interment in the shape of a skeleton and a funerary tablet of the XII dynasty, was then engaged in surveying the entire terrace—a task by no means easy, owing to the steep slope of the cliff and the difficulty of fixing his points. Mr. Newberry and Mr. Fraser had recently been joined by Mr. Blackden, an artist who was engaged in reproducing the colors of some of the more important subjects which had been outlined by Mr. Newberry on the scale of the originals.—*Academy*, Feb. 28.

THE MUTILATION OF ANCIENT MONUMENTS IN EGYPT.—Mr. Murch writes from Farshoot, April 30: “This last winter was the third season that certain very popular blocks of wood inscribed with the cartouche of Seti I have been on sale in the antiquity shops of Ekhnim and Luxor. They all come from Abydos. They are wooden keys taken from the niches cut to receive them at the point in the walls of a temple where two large stones come together. Anyone who has ever visited the Temple of Seti I, at Abydos, knows that these blocks of wood are not lying round there loose.

“The large stones are in some cases thrown off the wall, and in other cases the walls are quarried into, in order that these wooden blocks may be secured. Such is the story told me of the way in which the pieces are secured by a dealer, who also says that the pieces bring a good price, but that he is rather timid about selling them lest he get into trouble.

“It is not long since we were given the report of how the temple at Abydos had been so shut in by a wall that only persons having tickets of admission can enter. However successful the Antiquity Administration may have been in closing the temple against sight-seers unprovided with tickets, it is evident that mutilators are still permitted to carry on their depredations almost, if not altogether, undisturbed.”—C. MURCH, in *Academy*, May 16.

THE ANCIENT MONUMENTS OF EGYPT.—Mr. Wallis writes from Luxor, on Jan. 13: “I stated that the temples were unenclosed. On my return here I happened to meet the modeller of the Ghizeh Museum, who asked me, with an air of triumph, if I had seen the temples at Abydos and was content with the precautions that had been taken to guard them, he himself having been there to direct the works. What I found was this:—I had not long been in the temple of Seti I when at last I had a small crowd round me offering relics for sale. A remonstrance to the guardian resulted in an indiscriminate application of bastinado, and the crowd fled to the door, which was obligingly opened for them by another guardian. A similar performance was repeated several times during the course of my visit. It was the same at the temple of Ramses II. The fact being that my friend had placed doors to the temples at their entrances, but he had forgotten that access to them at the backs and sides was a feat that a crip-

ple might perform with perfect ease.”—HENRY WALLIS, in *Academy*, March 7.

EGYPT AND PALESTINE.—Prof. Sayce writes from Luxor (Feb. 4): “My voyage up the Nile this winter has, from a variety of causes, been somewhat barren of results. At El-Hibeh, the ancient fortress of the XXI dynasty, a little to the north of the modern Maghagha, we found that a ruined temple was being excavated which had been built by Shishak, the conqueror of Jerusalem. The ruins lie on the south side of the mounds.

“At Karnak Mr. Wilbour and myself went over the famous list of the towns of Palestine given by Thothmes III. I was particularly anxious to examine the third name, which follows those of Kadesh and Megiddo. Previous copyists had made it *Kh-a-a-i*, but a study of the Tel el-Amarna tablets had convinced me that it ought to be the city called by them Khazi. We gather from them that Khazi was in Northern Palestine, and the seat of an Egyptian governor who ranked next in importance to the governor of Megiddo. We found that the name given at Karnak is *Kh-z-a-i*, corresponding exactly to the name given by the cuneiform despatches. Our predecessors had mistaken a very plain representation of the bird which denotes the letter *z* for the eagle (*a*).

“It is curious that no one seems to have noticed that the name of Jerusalem heads the list of conquered towns in Judah enumerated by Shishak at Karnak. It is called Rabbath, ‘the capital,’ just as the capital of the Ammonites was commonly called Rabbath by their neighbors, or as to this day the capital of Gozo is called Rabato, while the same name is often applied to the old capital of Malta.

“Let me conclude with a suggestion for Old Testament students. We learn from *Judg.* III. 8–10, that the Israelites were oppressed for eight years by the king of Aram-Naharaim. The period of oppression would chronologically agree with the reign of Ramses III in Egypt; and it was in the time of Ramses III that Egypt was assailed by a league, which included the people of Nahrina. Nahrina is the Aram-Naharaim of the Bible, and the attack upon Egypt would explain the presence of a king of that country in the South of Palestine.”—A. H. SAYCE, in *Academy*, Feb. 28.

EGYPT, THE MINEANS AND THE HEBREWS.—If Dr. Edward Glaser’s surmise is well founded, an ancient contemporary monument attesting the presence of the Hebrews in the Delta of the Nile during the biblical period of their sojourn in Egypt, has at last been discovered. This eminent authority in the early history and geography, as well as inscribed stones, of Arabia, reports the Minean inscription, *Halévy, No. 535*, as referring to a battle between the South-Egyptian people, Madoy—the police-guard known in the Egyptian inscriptions from the VI to the XXVI dynasties—and the Egyptians (*Misr*), or rulers and inhabitants of the

delta; also as relating how the authors of this record, that is to say, the Minean governors of Tsar, A-shûr, and, as Dr. Glaser believes, of "the Hebrews of the Canal-country," gave thanks to the Minean gods and to the Minean king Abijeda' Jeshî for their escape from peril during a war between the possessor or king of the South and the possessor of the North, and for their escape from the interior of Lower Egypt to the Minean town Karnâ-u, when the war broke out between Madoy and Lower Egypt. Of the places thus mentioned in this important text, Tsar is evidently the fortress-town "Tsar-on-the-frontier," mentioned in the Tablet of Four Hundred Years, of which Prince Setî II was superintendent; and A-shûr is identical with the home of the Ashurim recorded in *Genesis* xxv. 3—"And the sons of Dedan were Ashurim:" also, as the Mineans escaped to Karnâ-u after they had lost Tsar and Ashûr, the position of the Minean town Karnâ-u is indicated to be distant from the Egyptian frontier just where it is now recognized between Mekkah and Yemen. It is furthermore evident, as Dr. Glaser says, that this intercourse between Egypt and Madoy in the Minean epoch can be assigned only to the latest period of the Hyksosings, or better still to the first years after their expulsion. Accordingly, the king of the South country must have been the last king in the xvii Egyptian dynasty, Kames?, or the first king in the xviii dynasty, Ahmes; and the latest king of the Hyksos was the one driven out by Ahmes, probably Aapeh-peh or Aphophis. It follows that these Mineans were driven out of Egypt at the same time the Hyksos were expelled, of whom they certainly were allies, and possibly blood-relations.—N. Y. *Independent*, May 21.

EGYPTIAN SOCIETY.—M. Golénisheff, the Russian Egyptologist, has acquired a papyrus which completes the text in which a list is given of the various grades of ancient Egyptian society, arranged in order of precedence. The text has been translated and commented on by Brugsch and Maspero, and has thrown considerable light on life in ancient Egypt.—*Athenæum*, May 16.

PROPOSED EXCAVATIONS BY BRUGSCH PASHA.—We are glad to be able to announce that the Egyptian Government has granted Henry Brugsch Pasha permission to excavate in the Nile valley. From the long residence of the distinguished Egyptologist in the country, and from his intimate acquaintance with its geography in ancient times, important discoveries may be expected. It is probable that the Pasha will commence operations in the neighborhood of the first cataract.—*Athenæum*, May 9.

MONUMENTS OF THE NINTH OR TENTH DYNASTY.—M. Maspero announced in the following words to the *Acad. des Insc.* on Jan. 23, the discovery by M. Bouriant of two monuments bearing names of the ixth or xth dynasty of Herakleopolis: "One is the palette of a scribe with the cartouche of

Merikari, the prince who is named in one of the inscriptions of Siout. The other is a bronze vase on whose sides are cut in open work the legend of King Mirâbrî Khiti, who is placed by the fragments of the royal Canon of Turin in the xth dynasty. M. Bouriant believes that these objects are from Thebes; but I have reason to believe that they come from tombs discovered at a short distance from Siout, three years ago, and which, from what I know of them, belong to the Herakleopolitan period.

"The discovery of M. Bouriant is of the utmost importance. The Herakleopolitan dynasties for a long time yielded up no records: the few monuments that belonged to them were classed in the XIIIth dynasty. I had attributed to them the fine tombs of Siout, and the investigations of Mr. Griffith supported my opinion. Now, thanks to M. Bouriant, a new Khiti king comes to light. I attribute to him a certain number of scarabs with the Mirâbrî cartouche which have not been hitherto classified."—*Rev. Arch.*, 1891, No. 1, p. 116.

THE PETRIE PAPYRUS.—In an interesting article in *Hermathena*, Professor Mahaffy prints the newly discovered fragments of the *Antiope*, and gives a fuller account of them than he supplied in this journal at the beginning of December. There seem to have been two columns in each page of the MS., which is supposed to have been a well-written quarto with a broad margin, each page containing some seventy lines. Amphion and Zethos appear to have enticed Lykos into the mountains by a friendly message. The first fragment mentions his guards and his entry into the house in which he was seized and bound. The next, the right-hand column on the same page, appears to be a *rhesis* refuting the claim of Antiope that her sons were the offspring of Zeus. The reader will remember in this connection the famous fragment quoted by Clement of Alexandria, in which Amphion throws doubt on his mother's assertion. The next fragment seems to be addressed by Zethos to his mother to calm her fears at the approach of the tyrant with the argument that if Zeus be really the father of her children he will aid them. We annex this passage as restored by Mr. Bury, remarking that in the fourth line the papyrus gives πάντων. Mr. Bury defends his conjecture πάντ' οὖν by *Herakleidai* 793.

—δὲ μηδ' ὅπως φευξόμεθα·
μάτην γὰρ ἡμᾶς Ζεὺς ἐγέννησεν πατήρ,
πλὴν εἰ μεθ' ἡμῶν γ' ἐχθρὸν ἄνδρα τίσεται.
ἵκται δὲ πάντ' οὖν εἰς τοσόνδε συμφορᾶς,
ὥστ' οὐδ' ἂν ἐκφύγοιμεν, εἰ βουλοίμεθα,
Δίρκης νεώρες αἶμα μὴ δοῦναι δίκην,
τοῖς δρῶσι δ' ἡμῖν εἰς τόδ' ἔρχεται τύχη.
ἧ γὰρ θανεῖν δεῖ τῷδ' ἐν ἡμέρας φάει,

ἦτοι τροπαῖα πολεμίων στήσαι χερί.
 ἀλλὰ σὺ μὲν οὔτω, μήτερ, ἔξαυδῶ τάδε,
 κλυ', ὃς τὸ λαμπρὸν αἰθέρος ναίεις πέλον
 Ζεῦ, μού τοσούτον μὴ γαμῆν μὲν ἡδέως,
 σπείραντα δ' εἶναι τοῖς τέκνοις ἀνωφελῇ.
 οὐ γὰρ καλὸν τόδ', ἀλλὰ συμμαχεῖν φίλοις,
 σῶσον δέ, πρὸς ἄγραν τ' εὐτυχῇ θείης ὁδόν,
 ὅπως ἔλωμεν ἄνδρα δυσσεβέστατον·
 τοιόνδε σοι χρὴ δόξασαι τυραννικόν.

The conclusion of this passage is occupied by the speech of Lykos when he first appears on the stage, and is introduced by a line of the chorus bidding the previous speaker be silent.

The last leaf contains the longest fragment. It begins with the close of the song the chorus sang after Lykos had entered the house. From behind the scenes Lykos utters a cry for help,

ὦ πρόσπολοί, με πάντες οὐκ ἀρήξετε;

and the chorus breaks into an exulting chant as he is brought bound on the stage. An excited dialogue follows, and Lykos is about to be slain, when Hermes intervenes as the *deus ex machina* and gives orders for the building of Thebes and the transfer of the monarchy to Amphion. The fragment closes with the reply of Lykos accepting the decision of the god.—*Athenæum*, Jan. 31.

Professor Mahaffy writes in the *Athenæum*: "Since Mr. Petrie's departure I have received a number of fragments belonging to the same cases or the same necropolis as those already described, and among these, though classical fragments were very small and scarce, a good many dated documents of the second and third Ptolemies came to light. These were either bills of labor—one of them evidently from the very foundation of the Arsinoite colony—or brief records of lawsuits, giving the names of plaintiff and defendant and of the three judges who tried the case. Only one small group of wills—these, too, of the year 10 of Ptolemy III—came to light. The classical fragments are in course of publication in my forthcoming memoir, but, though interesting to the philologist, and raising many important questions, they are not to be mentioned on a par with the *Antiope*. In addition to this mass of papyrus shreds I also received a box full of the actual cases of mummies, but very much lacerated and pulled in pieces. These remains I have been soaking in cold water till the lime or mud coating upon which the faces and decorations had been painted could be washed off, thus disclosing the layers of papyrus which formed the main substance of the cases. Most of the written papers had been deliberately torn asunder by the coffin-makers, especially where the rounding of the limbs made large surfaces in-

convenient, and many rags of coarse cloth were also used to bind edges. The tedious work of examining many scores of fragments in this way, one by one, is now well-nigh completed, and the result is that, in addition to a very few insignificant scraps of a classical character, we have a large number of Egyptian documents, both hieratic and demotic, which must be sent to some specialist in that department, but which are doubtless accounts and receipts, as are the great proportion of the Greek documents. The task of deciphering cannot be carried on together with the washing and separating; and the ordering and analyzing of the accounts I have reserved for Mr. Sayce, who has already collected large materials from our studies of last year. But by the way I have picked out receipts, in the form quoted by Dr. Wessely from the Rainer papyri, viz., $\delta\mu\omicron\lambda\omicron\gamma\hat{\omega}\ \xi\chi\epsilon\iota\nu$, with the name of the borrower and the bank agent—apparently a branch agent at Crocodilopolis, doing business for the great bank in Ptolemais. I have also depositions concerning criminal cases or lawsuits among neighbors, begging petitions, fragments of other letters, and copies of orders by magistrates, one of them mentioning Jews and Greeks as living together in the village of Pseneuris (in the nome of Arsinoë), and paying the same capitation tax. But I have only been able to touch the skirts of the collection, and shall require a long time, and more help, before I can tell even approximately what the materials are which are growing under our hands. Meanwhile, my memoir on the *Antiope*, the *Phaëdo*, the wills, and some of the other records, which are being autotyped, is going through the press, and will, I hope, be published by the Royal Irish Academy in a month or six weeks.

“Quite recently Mr. Crum, of Saltcoats, who has in charge the Coptic papyri brought by Mr. Petrie from Hawara, sent me a few fragments of Greek written in uncials, and evidently of Christian origin. There were also some scraps in the large official hand known as Byzantine. The uncial fragments were examined last week by my colleague, Mr. Bernard (Archbishop King’s Lecturer in Divinity), who brought his theological learning to bear upon the very brittle and much dismembered text. He first determined the writing to be closely similar to, and somewhat later than, the well-known *Codex z* (palimpsest) in our library. This ms., with its curious A and M, has been hitherto unique in character, and its Egyptian origin only a matter of conjecture. All doubts on that point are now cleared away. As regards the subject-matter, Mr. Bernard has actually discovered that it comes from the very little known treatise of Cyril *De Adoratione*, so that even the shreds containing single words can now be placed. The papyrus is very thin, extremely brittle, and written on both sides. We have only small portions of about ten pages. In due time he will publish this interesting discovery. But even this palæographical novelty is of little import compared to the enormous gain from the

recovery of numerous dated writings of the third century B. C. We have now materials for a great new chapter, and that the first, in any future history of Greek writing. We have discovered how (1) professional writers of classical works, how (2) official scribes, and how (3) private correspondents wrote in those remote days. These alphabets will explain many of the difficulties of the later cursives in the museums of Europe, which make Greek papyri so obscure and intricate a study.

"I may add that, in Prof. Wilcken's just-published *Tafeln*, No. VI gives an unpublished fragment of a gospel with similar A and M."—*Athenæum*, April 25.

THE CITY OF PUDHU-YAVAN.—Professor KRALL writes from Vienna, May 16: "In the *Academy* of April 11, Mr. Sayce gives a translation of the most important passages in the cuneiform inscription relating to the invasion of Egypt by Nebuchadnezzar in the thirty-seventh year of his reign. After the defeat of the army of Amasu, we read of 'the soldiers of the city of Pudhu-Yavan . . . a distant district which is within the sea.' Mr. Sayce rightly compares this Pudhu with the Biblical Phut, which is mentioned by the Prophets together with Lud among the mercenary troops of Pharaoh. Two Egyptian identifications have been proposed for the Biblical Phut. The one compares Phut with the Egyptian Punt (P-wunt), a country upon the African coast of the Red Sea, probably the tract from Suakin to Massawah (see my *Studien für Geschichte Aegyptens*); the other looks for Phut in Libya, agreeing with the old Biblical commentators. The second hypothesis alone is admissible. It is clear, then, that the Pudhu-Yavans are Libyan-Greeks; and consequently that the Greek town of Kyrene has the best claim to be the town in question. We learn from the classics the important relations of Amasis to the town of Kyrene, and also that the favorite consort of Amasis was a woman of Kyrene."—*Academy*, May 23.

MENEPHTAH'S PRIME MINISTER AND THE BIBLICAL BASHAN.—It has long been known that the Pharaoh of the *Exodus*, Menephtah, had a prime minister, who was the Fan-bearer to the king, chief herald to his majesty, priest of the order Ab, and who had been Beloved of Rameses Mer-Amen or Rameses II, father of Menephtah; he bore the honorary appellation of Mer-an, and the Egyptian name of Rameses-em-per-Ra, but his real Ethnic name was Ben-Ma-tsuna, and the land of his nativity was Tsar-Ba-sana—he was, therefore, a Syrian in Egypt, perchance an apostate Hebrew. Hitherto this modification of the biblical Bashan has not been met with elsewhere in ancient records; but now it turns up most unexpectedly in one of the Tel el-Amarna tablets. The Rev. H. G. Tomkins had already extended the Egyptian conquests to the country on the east of the Lake Gennesaret and the River Jordan, only to be supported by

Letter No. 132 of the Tel el-Amarna series, which was written by "Ar-tama-Samas, the governor of Tsiri-Basani," that is to say, the plateau of Bashan, of the Biblical land of Bashan. As the era of Amenophis IV, or Khu-enaten, the king of Egypt, to whom this letter was addressed, fell between one and two hundred years before Rameses II, Menephtah, and Ben-Ma-tsuna, the presence of the latter in Egypt may have been remotely due to the Egyptian conquest of or dominion over his native land.—N. Y. *Independent*, April 9.

ABU SIMBEL.—GENERAL SIR FRANCIS GRENFELL has had a battalion working for the last month at Abû Simbel. An inscribed tablet, of which there appears to be no previous record, and two broken statues have been found on the west side of the Great Temple. The vast accumulation of sand at Abû Simbel renders the work of excavation one of unusual difficulty, as well as of promise.—*Academy*, Jan. 31.

AHNAS=HERAKLEOUPOLIS.—At the recent annual General Meeting of the Egypt Exploration Fund Miss Amelia B. Edwards reported progress in carrying out the intention of the society to explore the site of Ahnas, the Biblical Hanes (*Isaiah xxx*, 4). Early in January of this year, M. Naville joined Count d'Hulst on the ground to be explored and began operations. At first they attacked the outlying necropolis, and pursued their excavations during three weeks, but with no very encouraging results: they opened more than a hundred tomb-pits, but all had been plundered in ancient times and had been again used for interments in Roman times. Supposing the investigators to proceed as they had planned, they must now be trenching the area of the great temple of the place. Another great temple like that of Bubastis is not to be hoped for, but valuable historical discoveries may be confidently awaited; for Ahnas el-Medîneh (the Herakleoupolis of the Greeks) represents the capital of that period in Egyptian history covered by the VIII, IX, X dynasties of the Ancient Empire, at present almost a blank in our knowledge of Egypt.—N. Y. *Independent*, April 9.

The *Athenæum* of May 30 reports that the chief discovery, at the time when Count d'Hulst closed the excavations, was the entrance to a temple built or repaired by Ramses II. The remains of the columns belonging to the temple show that it must have been of great size, and as the banner-name of Usertasen has been found on the spot, it would appear that it occupied the site of an older building.

BENI-HASSAN.—Now that the tombs of Tel el-Amarna and Beni-Hassan have been almost hopelessly ruined they have been provided with locked gates. The money for the purpose has been provided out of the proceeds of the tax which has been levied upon tourists during the last three years for the preservation of the monuments of Upper Egypt. The perpetra-

tors of the mutilation of the tombs last winter still remain unpunished.—*Athenæum*, Jan. 17.

The three members of the Archæological Survey of Egypt who have been working this winter for the Egypt Exploration Fund in the tombs of Beni-Hassan will remain there until the end of May. The cleansing of the walls of the tombs has revealed some most interesting scenes and hieratic inscriptions which throw light on the manners of Egypt before the age of the Hyksos.—*Athenæum*, May 16.

GEBELEIN.—M. Grébaut has procured a Greek papyrus from Gebelein, south of Luxor, which seems to show that a Persian garrison existed there up to the time of the Greek conquest of Egypt.—*Athenæum*, May 30.

MEDUM.—**THE OLDEST PYRAMID AND TEMPLE IN EGYPT.**—Mr. Petrie writes from Medum, March 31: "My work is now ended, as the question for which I came is solved: Medum is proved to belong to Snefru, and here, therefore, is the oldest dated pyramid. Moreover, there remains here in perfect condition the only pyramid temple ever yet found entire, the oldest dated building in the world.

"As the position of the temple was quite unknown, and its existence only a speculation, I had to work blindly through forty to sixty feet depth of rubbish, piled up around the pyramid during ages of quarrying in its mass. The result justifies the attempt; for though the temple discovered is absolutely plain and uninscribed, yet during the XII and XVIII dynasties visitors came here to the festivals of Snefru, and recorded their visits to his temple and pyramid in pious *graffiti* on the walls. That he was the genius of the place is also shown by a base of a statuette dedicated to the gods of a town, Tat-snefru, by a woman named Snefru-khati.

"The temple is joined to the east face of the pyramid. The front is about thirty feet wide and nine high, with a door in the south end of the face. A passage parallel to the front, and twenty feet long, leads to the chamber, which is twenty by seven feet. A wide doorway leads from this into the open-air court built against the pyramid face. The altar of offerings, quite plain, stands in the middle of the court, and an obelisk on either side of it. These obelisks are over thirteen feet high, with rounded tops and uninscribed. Of course I have had to re-bury temple and tombs completely in order to preserve them, in the total absence of all inspection or conservation officially. On clearing the interior of the pyramid, which was open from the north, I found in the rubbish the fragments of a wooden sarcophagus; so the chamber already known was doubtless the sepulchre anciently plundered.

"The construction of the pyramid has also been examined. It plainly consists of a small stone mastaba, heightened and built around repeatedly

until there were seven steps of construction. Over all these a continuous slope of casing was added, so that it appeared with one long face from the top to the ground. This bears out what I had suggested years ago, that *the mastaba repeatedly added to originated the pyramid form.*

"The tombs here prove to have been elaborately plundered in early times, when their plans and arrangements were well known to some persons. Forced holes leading straight to the chambers have been made, and nothing portable is left for the present age. Many tombs which contained only bodies have not been disturbed; and from these I have collected over a dozen complete skeletons for study, which will give a starting-point at the earliest historical reign for comparing the types of Egyptians of later ages. A very important matter is the mode of burial. Hitherto we have always found Egyptians buried full length; but most of these earlier bodies are crouched, many with the knees up to the chin. And I am told that many crouched bodies in large earthen jars were found lately at Gizeh, but were all destroyed. These bodies are always on the left side, with the face east, head north. This proves that a special idea was connected with such burials. But no funereal vessels or head-rests are found with these interments; only around the body are sometimes a few scraps of charcoal, as if it had been surrounded by live coals at the time of burial. At the same period full-length burial was practised, accompanied by funereal vessels of diorite and alabaster and head-rests. This distinction seems to be connected with the two races—the aborigines and the conquerors, who were not yet fused together.

"A good deal of the pottery of the IV dynasty has also been found. It differs from that of all later periods, and completes our historic knowledge of the pottery of Egypt.

"The mode of laying out buildings has been found. A mastaba with sloping sides had to be founded on uneven ground. A wall, L-shape, was built outside of each corner. Levels on that were drawn a cubic apart; red vertical lines on these walls defined the width of the building at the ground-level, and black lines drawn sloping down outwards from the red at ground-level defined the planes of the faces. From this perfect geometrical arrangement it was easy to start the work, no matter how uneven the foundation.

"Besides this exploration, a survey of the place in general, and especially of the exact dimensions of the pyramid, is now done. The first result of this is of great value on the geometric theory. The pyramid of Khufu, as we all know, is so proportioned that the ratio of height to circuit is that of a radius to its circle; and moreover the ratio of 7 to 22 is embodied by the dimensions of height and base being 7 and 11 times 40 cubits, which strongly shows that 7 to 22 was the recognized ratio. Here

in the pyramid of Snefru, which preceded that of Khufu, exactly the same ratio of 7 to 22 is found, the angles being alike. And, moreover, the size is such that the height and base are 7 and 11 times 25 cubits. Therefore the proportion in a pyramid and the use of the approximation 7 to 22 are both older than the great pyramid of Gizeh; and this example strongly corroborates that theory of the dimensions.

"An illustration of official amenities may interest Englishmen who do not know how things go here. This year an official spy has been appointed to watch me, although I have worked for eight years simply on my honor, and have not concealed anything from the Government. And I am told that I shall be charged for this benevolent attention an amount which is larger than the whole value of the things I remove. Meanwhile, a few miles off, natives have long been pillaging and destroying towns and tombs unchecked in a scandalous manner, because the staff is insufficient to control them! Those who know something of the state of officialdom here can understand what all this means."—W. M. FLINDERS PETRIE, in *Academy*, April 18.

DATE OF THE PYRAMID.—Mr. FLINDERS PETRIE has left Egypt for Greece, after concluding his excavations at Medûm. The hieratic *grafiti* he discovered there, which have been translated by Brugsch Pasha, definitely settle the question as to the date of the pyramid of Medûm, and show that it was built by Snefru of the third Egyptian dynasty.—*Athenæum*, May 16.

SEHEIL.—Mr. WILBOUR, the American Egyptologist, has sent his brother students of Egyptian as a New Year's gift a privately printed copy of the inscriptions he discovered last winter in the island of Seheil relating to the "canalization of the First Cataract." Seheil lies to the north of Philæ, in the middle of the cataract, and one of the inscriptions states that a canal was cut through the mainland opposite, sufficiently large to admit the passage of war-ships, in the time of Usertesen III of the XII dynasty. The canal was reopened, as we learn from the other inscriptions, in the reign of Thothmes III. To the copies of these inscriptions Mr. Wilbour has added the copy of a recently found stêlê which gives the names of certain Egyptian officers who, according to the Tel el-Amarna tablets, were sent as commissioners to the subject states of Palestine towards the close of the XVIII dynasty.—*Athenæum*, Jan. 17.

THEBES.—**GREAT DISCOVERY OF MUMMIES BY M. GRÉBAUT.**—Mr. TAYLOR writes from Luxor, Feb. 10, 1891: "On February 6 a discovery was made in the necropolis of Thebes, second only in importance to the discovery of the royal mummies at Dehr-el-Bahari by M. Maspero in 1881. About half a mile from Dehr-el-Bahari a pit has been found containing several hundred magnificent mummies. These, like the royal mummies, had evi-

dently been removed from the tombs and concealed in this receptacle, as a precaution, by the servants of the priests, probably at the same time and for the same reasons which caused the royal mummies to be placed in the receptacle where they were found by M. Maspero. This removal is believed by M. Maspero to have taken place in the reign of Aauputh, son of Shashang, of the XXII dynasty (*circa* 966 B. C.).

"The coffins hitherto found all belong to the XXI dynasty, and are those of the priests of Ra-Amun and their families. The pit is about forty-five feet in depth, at the bottom of which are two corridors filled with coffins and treasures of every description. In the lower corridor—which as yet has only been explored—it is computed that there are some 200 coffins, and the second corridor is believed to be not less extensive. The shaft is forty-five feet deep, its mouth is about twelve feet in diameter, and its sides of rough limestone. One of M. Grébaut's native assistants, who was superintending the work of hauling up the mummy cases, told me that he had been the first actually to enter the corridor where the mummies and treasures lie. The shaft had then been excavated only as deep as the mouth of the corridor; and he crept in on his hands and knees, and stood in what he describes as being like a palace of enchantment. The corridor, he said, is some ten or twelve feet high, and 250 feet long. It runs in a northerly direction from the shaft towards the Theban hill. At the end there is a short corridor branching from it at right angles; and at some height above the floor at the end is the entrance to a second very long corridor, full of treasures, which has been sealed up for the present by M. Grébaut. My informant went on to describe the wonderful sight in the corridor. Groups of mummies are placed at intervals in families. The number in each group varies from two to six or seven, father, mother, and children; and around them, exquisitely arranged, are vases, models of houses, models of *dahabiehs*, cases and boxes full of *ushabtis*, statuettes, and every conceivable treasure of ancient Egypt. Without even a speck of dust upon them, this profusion of treasures had remained unlooked at by any eye for nearly 3,000 years. He said that photographs had been taken of the place in its undisturbed state, which he declared to be that of a perfectly kept and well arranged museum.

"At the present time, thirty or forty men are working all day with ropes and pulleys, hauling up the mummy cases; and in four or five days everything will be cleared out and carried on board M. Grébaut's steamers and barges, several of which are waiting to be filled. Long processions of natives, staggering under their burdens and escorted by mounted and well armed police, are now to be seen wending their way across the desert from the pit's mouth to the river bank."—*Academy*, Feb. 28.

M. Grébaut writes to a correspondent in England: "The excavations were opened on the 31st of January, east of the Temple of Queen Hatasd, at Daïr el-Bahari. Having cleared out a pit 49 feet deep, on the south side at the bottom the doorway was found closed by a pile of large stones. A first gallery, aligning north and south, after 250 feet went down by a flight of steps 17 feet, and then continued 39 feet further to two funerary chambers, one 16 and the other 8 feet large; at the top of the steps the doorway of a second gallery, 177 feet long, was encountered.

"All of these subterranean vaults were filled with mummies, inclosed for the greater part in triple mummy-cases; there were 163 of them. Upon a few of the outer chests the places for the names were left uninscribed. A dozen of the inner cases had been gilded, but the gold is scraped off, the hands and the gilded masks have been carried away. The sarcophagi were placed in these chambers without order; often they were piled one upon another. The most recent, and the most numerous as well, belong to the twenty-first dynasty.

"Such facts show that we have found a place of concealment made at the same time and in the same circumstances as that of the royal mummies of Daïr el-Bahari, the latest of which were also of the twenty-first dynasty. The outer gilded cases of the royal mummies also had been damaged by thieves in ancient times; and, in like manner, the royal mummies were not all of them resting in their primitive inner mummy-cases. At the time of a removal made in haste, when these hiding-places were made, the inner mummy-cases whose exterior cases had been broken by thieves, were placed in other outer cases taken from factory stock, and often time lacked or care was not exercised to write the name on the new outer chests, which we find upon the inner mummy-cases. The names surviving upon the exterior cases are almost all those of priests and priestesses of Amen. There is, however, one priest of the Queen Aah-hotep (seventeenth dynasty), a priest of Set, etc. These sarcophagi generally remain in fine preservation; they are very beautiful, and their decorations extremely delicate, rich and pretty.

"While these sarcophagi were being taken out and transported, I had only just time enough to make up a brief inventory, comprising merely the names, and taking note of the state of preservation. Still, I have recognized some important personages; one of these priests was set over the royal treasury, another was chief of the royal auxiliary forces called Mashû-ash, etc.; there is, also, a Pinotem, son of Masaharta—recalling a Masaharta of the family of the Pinotem (twenty-first dynasty) present in the find of royal mummies, and rendering it probable that we have now his son; and several other names resemble those of the Pinotem family, such as Isi-em-kheb, Honttaui, Nesi-khonsu, Ra-ma-ka, etc.

"In addition to the sarcophagi we have collected seventy-five wooden statuettes, each containing a papyrus within, some of which are of large size. Although we cannot doubt the papyri are all copies of the Ritual, it will not be without interest to possess the Theban Ritual of the twentieth and twenty-first dynasties, well characterized and defined. I hope that among the papyri which the 163 mummies ought to be provided with, there will be some texts other than the Book of the Dead. The other antiquities recovered in the subterranean passages with the mummies are curious, but, aside from a few stelæ, offer no historic interest.

"The discovery will be important for history, however, by reason of the genealogies and the titles of a series of priests running through several centuries, even if we do not find other manuscripts upon the mummies than funerary books. For religious studies the mine is richer still, from the fact that these sarcophagi of the priests are unlike others—figures and scenes abound upon them, which are almost always something novel. Doubtless we shall obtain from among them the explanation of questions still remaining obscure, together with much unexpected information. As one or two unlooked-for examples—upon a sarcophagus of the twenty-first dynasty, the God Shû, who sustains the heavens, is represented under the form of the god Bes, hitherto regarded as belonging only to a late epoch. The *Akimû* mentioned in texts are believed by many to be stars; but they turn out to be the quadrupeds which tow the solar bark, eight in number, four white and four black, each group of four being formed of two white and two black, and they are not jackals because those of one group have ears shaped like the *uas*-scepter. New points of this kind are so numerous that the careful investigation of these sarcophagi will certainly render great service to the interpreters of the religious texts.

"In April, I intend to begin opening the sarcophagi, and the study of the inner mummy-cases which will permit us to make out a more exact catalogue of the discovery, and I then expect many surprises. I have often observed one name upon the cover and another name upon the exterior chest; it is probable that the interior mummy-case will give, frequently, a third name, which will be the true one. The transfer, when this hiding-place for mummies was formed in antiquity, was done in a great hurry; little inside mummy-cases were inclosed in large outer cases, which belonged to other mummies, perhaps destroyed, and those who were engaged in the removal put to service all the chests and all the covers at hand. I have no hope of finding royal mummies, for I have not come across any indication of such; but, at the present hour, we have no knowledge as to what we shall find in some of these sarcophagi."—N. Y. *Independent*, March 26.

The Cairo correspondent of the London *Times*, telegraphing on Feb. 24, gives the following as the latest details, according to *Nature* of Feb. 26: "The total underground area is about 153 metres, excavated in the limestone-rock to over 65 feet below the surface. The same disorder reigned amongst the contents of the tombs as was found when the famous royal mummies were discovered nine years ago. Sarcophagi were piled upon sarcophagi, and alongside were boxes, baskets of flowers, statuettes, funeral offerings, and boxes crammed with papyri. There is every indication that the place, though originally constructed as a vast tomb, was chosen for hurried concealment in time of tumult. Some of the exteriors of the mummy-cases are unusually richly decorated with religious subjects, carefully depicted; others of large size enclose mummies in a broken condition, and were apparently procured hastily, as the spaces for the occupants' names are left unwritten upon."—*Science*, March 20.

M. Grébaut writes to the *Journal des Débats*, Feb. 7: "At Deir el-Bahari I had seen the sarcophagus of a queen remaining in place. I conducted excavations on that side as it had never been explored. At a depth of fifteen metres the door to the underground passages were found where 180 cases of mummies of priests and priestesses of Ammon had been heaped up, with the usual accessories; among the first things seen were some fifty Osirian statuettes, the first ten examined containing each a papyrus. Immense cases with triple coffin are very numerous. Among them one of a priest of Tah-Hotep.

"Against the south side of the temple I was seeking for a table of offerings of the XI dynasty left *in situ* . . . and in doing so came upon the door of a tomb of the XI dynasty that had remained untouched. It belonged to a priestess of Hathor named Ament. At the further end of the small sepulchral chamber was an enormous sarcophagus of calcareous stone without decoration or inscription containing a broken wooden case with engraved and painted inscriptions. Around the priestess's mummy are about ten pieces of stuff with manufacturer's marks, the mention of the year XXIV but without any royal name. There were four mirrors, three of silver and one enamelled. In front of the stone case was a wooden coffer similar to the priestess's mummy case, containing the skins and bones of two bulls, the remains of her trousseau and three nets for perfume vases."

We read in the *Chronique des Arts*, 1891, No. 8: "There were also found 110 cases containing statuettes and votive offerings, 77 papyri and a quantity of other objects."

NEW DISCOVERIES IN THE TEMPLES.—ISAAC TAYLOR, writing from Luxor, Jan. 8, 1891, says: "The excavation of the Theban temples is proceeding apace, and new discoveries are daily being made. The great hall of

the Palace-Temple of Rameses III at Medinet Habu has been cleared of about fifteen feet of rubbish. Three days ago the staircase ascending to the top of the great northern pylon was discovered. The summit of this pylon commands a magnificent view, probably the best of the whole plain of Thebes—the colossal statues of Amenhotep III in the foreground, the Rameseum in the middle distance, and, across the river, the temples of Luxor and Karnac.

“Still more interesting results have been yielded by the excavation of the Temple of Rameses II at Luxor. Thirteen colossal granite statues of Rameses have now been discovered, and there must be three more beneath the mosque. Built into a wall, probably of late Roman date, which runs across the floor of this temple, are cartouches of Khu-en-aten and his wife, proving that before the heretic king abandoned Thebes he must have erected a temple, which was destroyed by his successors. Close by, at a level below the floor of the temple, the workmen found, yesterday, an uncompleted granite statue. The greater part is only roughly chiselled out; the nose is finished, but the eyes and mouth have not been commenced, the block of granite having split in two while under the sculptor’s hands.

“Two days ago a still more important discovery was made. On the western wall there is a picture, about six feet by four, of Rameses II dedicating his temple to Amun-Ra. In this picture there is a capital representation of the completed temple as seen from outside the western pylons. Both the obelisks are shown, and the four great masts, with their flags displayed. There are now only three colossi outside the pylons; but the picture of the temple shows that there must originally have been six, two seated, and four in a standing position. The portal between the pylons, of which no vestige now remains, is also shown, as well as the entrances to the two staircases which led to the summit of the pylons. With the aid of this representation there will be no difficulty in discovering the staircases themselves, as their position is exactly indicated. The entrance to the southern staircase is, however, now buried under some twenty feet of soil and rubbish, which will have to be removed. When this is done, and access is gained to the roof of the pylons, another attractive feature will be added to Luxor, as the view from the summit will doubtless be superb. I may add that, in the little granite temple, a cartouche of the XII dynasty has been discovered, as well as one of Thothmes III.”—*Academy*, Jan. 24.

TUNISIA.

CARTHAGE.—EXCAVATIONS BY FATHER DELATTRE.—A communication by M. de Vogüé to the *Acad. des Inscr.* on March 13, and an article by the excavator in the *Rev. Arch.* for Jan.-Feb. 1891 (pp. 52-69) give an account of the latest discoveries of Punic tombs at Carthage by Father Delattre.

M. Perrot speaks thus of a study by Father Delattre published in 1890 which is entitled: *Les tombeaux puniques de Carthage* (8vo., Lyons, pp. 124). "In it are given all the requisite details on the tombs of the Punic period discovered and excavated at Carthage either by Father Delattre or other explorers. All these discoveries complete and illuminate each other. Thanks to the researches of Father Delattre and to the material he has collected, the chapter which I had devoted in the *Histoire de l'Art*, t. III, to the Phœnician tomb in Africa and its contents should be to-day considerably enlarged. It also contains curious information regarding the art of the Carthaginian ceramist."

The new discoveries connect immediately with those described in the above brochure. M. de Vogüé says of the recently discovered tombs in this ancient necropolis of Byrsa, that they are of the same character as previous ones but that the objects they contain are more interesting. Together with vases, lamps, Egyptian necklaces of types already known, he has found jewelry in gold and silver, and, for the first time at this point, a written text. On the belly of a rude vase, a single formula is traced four times in ink, which M. de Vogüé reads: "Abdhaal, deceased." The characters are Aramaean and similar to those on papyri and *ostraca* found in Egypt; an interesting point which M. de Vogüé expects to elucidate in the future.

The discoverer, Father Delattre gives in detail the discovery of each tomb and its contents. Tomb I was opened July 4 by a horizontal trench up to the door instead of the usual well dug perpendicularly. A Byzantine and a Roman wall were passed and remains of Greek, Roman, Christian and Arabic monuments and objects, as well as a simple Punic trench tomb. The door of the large tomb was of tufa, 2 met. high, and it was untouched. The funerary chamber had a flat ceiling and was paved with four large slabs closing two sarcophagi. One skeleton was lying on the left: two niches on either side of the end contained each two large vases, and another vase of whitish earthenware and pointed base lay below them. A circular mirror, a bronze hatchet, three amulets, a Bes and two small figurines, one with a dog's head and the other with a hawk's head, bits of cloth and wood from the coffin, were found about the body. In the niches were two paterae, two Punic lamps, a small hatchet, two bronze ring buckles. The sarcophagi when opened contained their bodies but no object beside part of a bracelet. The tomb will remain open and be one of the principal sights of Mt. Byrsa.

Tomb II was discovered August 28. It consisted of two slabs covering a trough containing several skeletons. Here was found a vase of red clay with conical base with the first Punic characters met with in the necropolis. Several examples of well-known forms of pottery were found, be-

sides a fine vase decorated with a violet band between two black lines, which is a kind not occurring hitherto except in the necropolis by the sea. The contents seem to show that the tomb had been used several times at different periods.

Tomb III was opened on Sept. 10, very near the preceding and was quite a surprise from its contents. With three skeletons and an interior half filled with earth were a Punic coin, and twenty terracotta tear-bottles, found here for the first time. One Punic vase shows the use of the turning lath—a unique example in Punic ware.

Of the greatest importance was tomb IV, opened Oct. 4. It was only a trench covered with slabs, but it contained a rich collection of funerary objects in gold, silver, bronze, glass, ivory and other materials, as follows:—*Gold*: a diadem formed of a band 36 cent. long; a pendant ending in the shape of a *crux ansata*. *Silver*: a ring; a male statuette, standing stiffly, with left leg advanced and arms clinging to body; a spherical bead; a small pendant tablet, probably an amulet. *Bronze*: two disks, probably cymbals or castagnettes; a circular mirror; an arrow-head; a vase handle. *Ivory, shell, etc.*: an ivory tablet of rectangular form whose surface is decorated with figures and designs that have partly disappeared, enough remaining to show that it was in Assyrian style; two large pin-heads; a bivalve shell of the genus *Pecten*, whose two valves are joined by a brass wire while a bronze ring is placed in the centre of the flat valve; eighty-one remnants of ostrich eggs, one of which has a decoration of red lines forming squares, while others also preserve traces of their vermilion decoration; one fragment also proving that the edge of the vases thus formed was sometimes dented; two pieces of black substance, one of hard silex, the other bituminous. *Glass, etc.*: a necklace composed, besides some beads of bronze or agate, mainly of beads of glass paste among which are four scarabs, several figures of Bes, six figurines of black paste, four masks, the winged figure of a man with a monkey's head, a cow, a *uraeus*, a lotus flower, two small unguent vases; a mass of over four thousand beads, red, white, yellow, orange, green, brown and black. *Ceramics*: a vase of greyish earth with cover and two handles, containing human remains; two vases of red ware resembling censers in shape; two bottomless conical goblets of red ware which may have been musical instruments; three cups, wide and low, decorated with black lines on a light red ground; a small CORINTHIAN OINOCHOË, nearly hemispherical in shape and with broad base, short neck and small pinched-in mouth, and high handle. This vase has a decoration consisting of a band of lean animals with raised tails around its centre, while above and below is a linear decoration in white or dark color. Beside some more ordinary pottery there was an unpolished alabastrum.

Tomb v was opened on Nov. 14 and was similar in shape to the preceding. It contained an entire ostrich egg, unpainted, and fragments of another; three vases; a *Pecten* shell; a bronze hatchet; a bronze mirror; a small unguent vase of brown glass with yellow incrustation; some odoriferous gum-like incense (perhaps *ladanum*); parts of a necklace, etc.

The sixth and last tomb was opened Nov. 16 and contained merely a lamp and three vases.

CARTHAGE.—ARCHÆOLOGICAL NOTES.—Father Delattre communicated to the *Acad. des Inscr.* on Jan. 2, through M. Héron de Villefosse: (1) the epitaph of a soldier of the first urban cohort, a corps detached from the municipal guard of Rome and sent to Africa to become for the procurators a militia capable of aiding them in collecting the imperial revenues and of lending aid in guarding the imperial domains; (2) a note on a pagan mosaic, decorated with a central medallion which represents Amor and Psyche with Latin inscriptions alluding to the all-powerfulness of Love; (3) a fragment of inscription giving a list of legionaries with the country of each one,—the cities enumerated being in Lusitania and Italy.

ALGERIA.

TIPASA.—BASILICA OF ST. SALSA.—M. l'Abbé Duchesne communicated to the *Acad. des Inscr.*, on March 13, the discovery made in the basilica of St. Salsa at Tipasa of a number of inscriptions. In the centre of the building a rectangular base was found which supported the sarcophagus of the saint: the sarcophagus itself was also found, broken into many fragments. Between the tomb and the apse was a mosaic inscription in the pavement composed of seven rude hexameters giving the name of the saint: MA[RTYR] HIC EST SALSA DULCIOR NECTARE SEMPER[QUAE MERUIT CAELO SEMPER HABITARE BEATA. Within the masonry of the base was found the pagan epitaph of one *Fabia Salsa* who died at sixty-two years, doubtless of the same family.—*Ann. des Mon.* 1891, p. 109.

MOROCCO.

RESEARCHES OF M. DE LA MARTINIÈRE.—M. Héron de Villefosse reported to the *Acad. des Inscriptions* on Feb. 13, the results of the last archæological campaign undertaken in Morocco by M. de la Martinière.

At *Lixus*: a votive inscription in Phœnician letters, the first Semitic inscription found in this locality and giving promise of further discoveries of the same nature.

At *Volubilis* the epigraphic harvest continued to be abundant; thirty-five inedited inscriptions were found, mostly epitaphs. One is a long dedication of the year 158 by the members of a religious college or asso-

ciation, the *cultores domus Aug(ustae)*. This interesting inscription, which contains the name of a new governor of the province, Q. Aeronius Monianus, was discovered in the interior of a large building which was probably the meeting house of the association. Another text, of the time of Marcus Aurelius, mentions a conference held by the procurator of Tingitana with a chief of tribe, a *princeps gentium*, whose name is wanting. The tribe mentioned was probably that of the *Baquates*, one of the most important in the country. Among the Roman epitaphs, it is strange to find one which does not read, like Roman texts, from left to right, but like Phœnician texts, from right to left.—*Rev. Arch.*, 1891, p. 236.

ASIA.

HINDUSTAN.

SERPENT WORSHIP.—At a meeting of the Asiatic Society, April 20, Surgeon-Major Oldham read a paper *On Serpent Worship in India*. He began with the inquiry "Who were the Nagas over whom, according to the Rajatarangiri, Nila reigned when Kashmir was raised above the waters?" In the Puranas the Nāgas are generally described as supernatural beings or actual serpents, and are consigned to subterranean regions. But in earlier writings they are mentioned as a people, and as ruling in the valley of the Indus and the neighboring country, with Pātala and other cities as their capitals. The author identifies the Nāgas with the Takhas, a Rajput tribe occupying the mountainous country to the eastward of Kashmir. These people have remained under more or less independent chiefs of their own race until comparatively recent times. They have escaped conversion to Islam, and have saved their temples and their idols from Mohammedan iconoclasts, and their religion from the orthodox Mahman. Here the serpent gods are still worshipped with their ancient rites—not as dangerous reptiles nor as symbols, but as the deified rulers of a once powerful people. The serpent gods Sessa, Vasuki, Jahshaka, and others are represented in human form, but with the hoods of five, seven, or nine Nāgas or cobras expanded over their heads, as shown in the illustrations to Fergusson's "Tree and Serpent Worship." Tradition asserts that these Nāga chiefs were rulers of all the country round and of a great part of India. A yearly pilgrimage still takes place to a mountain lake, called the Kailās Kund, which is held sacred as having afforded a retreat to Vasuki when surprised by his enemy Garuda. The Takhas are a remnant of a powerful Rajput tribe who once ruled the Indus valley and nearly the whole Panjāb, and who sent out colonies to the coasts of India, Ceylon, and the Indo-Chinese peninsula and islands. The author observed that the legend

of the churning of the ocean by the serpent Vasuki refers to the commerce carried on by that chief or his people with distant lands. He then went on to show that the Nāgas were Asuras, that the Asuras were of the same race as the Suras or Devas, and that, consequently, the Nāgas were an Aryan tribe. One result which the author arrives at is that the Buddhist and Jaina religions arose among the Nāga people, and that Buddha himself was probably of Nāga race. Hence the close connection between the serpent and Buddhism which has given rise to so much speculation. Surgeon-Major Oldham sums up the results of his inquiries thus: 1. That the Nāgas were a sun-worshipping, Sanskrit-speaking people whose totem was the Nāga or hooded serpent. 2. That they became known as Nāgas from the emblem of their tribe, with which, in process of time, they became confounded. 3. That they can be traced back to the earliest period of Indian history, and formed a portion of the great Solar race. 4. That they, with other divisions of this race, at first occupied the north and west of India, but afterwards spread towards the east and south. 5. That some of these tribes, and among them the Nāgas, retaining their ancient customs, and not readily admitting the ascendancy of the Brahmans, were stigmatized as Asuras. 6. That among a portion of the descendants of this people Nāga-worship in its primitive form still survives, and that it consists in the adoration, as Devas, or demi-god, of the ancient chieftains of the tribe. 7. That the connection between the serpent and the Buddhist and Jaina faiths can be thus explained. 8. That in all Asiatic countries it was the Nāga or hooded serpent only which was held sacred. —*Athenæum*, May 2.

MADRAS (Government of).—EPIGRAPHIC AND ARCHÆOLOGICAL REPORT.

—The following paper from Dr. E. Hultzsch, Government Epigraphist, to the Chief Secretary to Government, dated Bangalore, 6th April 1891, No. 79, was issued on June 10th.

I have the honor to submit my progress report for October 1890 to March 1891. During this period the first part of the inscriptions of the Tanjore Temple (*South Indian Inscriptions*, vol. II) has been nearly completed. It will be ready for issue in a few weeks, and the second part before the next camping season. Part I contains six long inscriptions of the Chôla king Râjarâja, who ruled from about 1004 to about 1032 A. D., fourteen inscriptions of his son and successor, Râjendra-Chôla, two of Kônêrinmai-konḍân, and one of Tirumalaidêva, dated 1455 A. D. In order to expedite the correction of the proofs, the government permitted me to stay at head-quarters during the major part of the past cool season (G. O., dated 30th October 1890, No. 724, Public), and I was only away from the 13th November to the 24th December 1890, in order to prepare mechanical copies of those thirty-seven inscriptions of the great temple

at Tanjore which, through want of time, were only copied in writing in 1887-88. . . . The remainder of the time was employed in visiting a few remarkable places in the neighborhood of Tanjore.

KARUVŪR.—The town of Karuvŭr, which is situated on the railway from Erode to Trichinopoly, is one of the chief finding-places of Roman coins. The Rev. H. Little, of the Wesleyan Mission, possesses a large number of specimens of two silver coins, which have all been unearthed at Karuvŭr. The two types are: No. I.—Denarius of Augustus—Obverse: Head of the emperor; legend, *Cæsar Augustus Divi F[ilius] Pater Patriæ*. Reverse: Armed figures of the two sons of Augustus; legend, *C[aius] L[ucius] Cæsares Augusti F[ilii] Co[n]s[ules] Desig[nati] Prin[cipes] Juvent[utis]*. No. II.—Denarius of Tiberius—Obverse: Head of the emperor; legend, *Ti[berius] Cæsar Divi Aug[usti] F[ilius] Augustus*. Reverse: A sitting figure; legend, *Pontif[ex] Maxim[us]*. Of the second type several specimens turned up last year in the Bangalore Cantonment bazaar. . . . The fact that Roman imperial coins are found in such numbers at Karuvŭr proves it to be an ancient centre of commerce. According to the Tamil Dictionaries, Vañji, *alias* Karuvŭr, was the old capital of the Chêra kings, and Dr. Caldwell (*Comparative Grammar*, p. 96 of the Introduction) has satisfactorily identified it with Ptolemy's *Κάρουρα βασιλειον Κηροβόθρον*, "Karŭra, the capital of the Chêra king." The name Vañji was subsequently transferred to Tiruvañjikkulam or Kodungallŭr (Cranganore), the later capital of the Kêrala Perumâls (Dr. Gundert's *Malayâlam Dictionary*, s. v. Vañji). In the inscriptions of the Karuvŭr temple, the town is called Karuvŭr or Mudivaraṅgu-Chôlapuram. It belonged to Veṅgâla-nâḍu, a division of the Kōngu country (No. 61). The old name of the temple, which is preserved in the inscriptions and in the Tamil *Periyapurâṇam*, was Tiruvâṇilai-Mahâdêvar, "the lord of the sacred cow-stable." The modern designation Paśupatiśvara is a Sanskrit rendering of this Tamil name. The two earliest inscriptions of the Karuvŭr temple belong to the ninth year of the reign of the Chôla king Kô-Parakêsarivarman, *alias* Râjêndradêva (No. 59) or Râjêndra-Chôladêva (No. 65), who seems to have been the successor of his namesake, the great Râjêndra-Chôladêva of the Tanjore inscriptions (see paragraph 1, above). Just as an inscription of his third year at Tiruvallam (No. 75 of G.O., dated 11th March 1890, No. 189, Public), one of his fifth year at Viriñchipuram (*South Indian Inscriptions*, vol. i, p. 134), and two of his ninth year at Mâmallapuram (Carr's *Seven Pagodas*, pp. 142 and 144),—the two new inscriptions record that the king defeated Âhavamalla at Koppam on the bank of the Pêrâru. This Âhavamalla is the Western Châlukya king Âhavamalla II or Sômêśvara I, who ruled from about Śaka 964 to about 990, and Koppam, the place of his defeat, has to be identified, as sug-

gested by my assistant, with Koppa on the Tuṅgâ river in the Kaḍûr district of the Maisûr State. The next in chronological order is the inscription No. 58, which is dated in the third year of Kô-Râjakêsarivarman, *alias* Vîra-Râjêndradêva. In this inscription and in an inscription of his sixth year at Tiruvallam (No. 16 of G.O., dated 11th March 1890, No. 189), the king claims to have conquered Âhavamalla. The new inscription further reports that he defeated Vikkalan, the son of Âhavamalla, at Punal-Kûdal-saṅgam (*i. e.*, "the junction of the rivers"), and drove him out of Gaṅgapâḍi, beyond the Tuṅgabhadrâ river, and that he killed the mahâdaṇḍanâyaka Châmuṇḍarâja. As he bore the surname Râjakêsarin, Vîra-Râjêndradêva must be distinct both from the great Râjêndra-Chôladêva and from Râjêndradêva, whose surname was Parakêsarin, and he was probably a successor of the last-mentioned king, as he continued to fight with Âhavamalla and was also at war with Âhavamalla's son Vikkalan, who might be identified with the Western Châlukya Vikramâditya VI. (Śaka 997 to 1048). The mahâdaṇḍanâyaka Châmuṇḍarâja is perhaps identical with the mahâmaṇḍalêśvara Châvuṇḍarâya, who, according to Mr. Fleet's *Kanarese Dynasties* (p. 45), was a tributary of Âhavamalla II. The historical portion of the inscription contains some other statements which may become important when this obscure period of the Chôla genealogy should be cleared up through new discoveries. The king is said to have conferred the title of Râjarâja on his elder brother, the title of Chôla-Pâṇḍya and the sovereignty over the Pâṇḍya country on his son Gaṅgaikonda-Chôla, and the title of Sundara-Chôla on Muḍikonḍa-Chôla, whose relation to the king is not specified. At the time of the inscription, the king resided at the palace of Gaṅgaikonda-Chôlapuram, now a ruined city in the Uḍaiyârpâlaiyam taluk of the Trichinopoly district. The remaining Karuvûr inscriptions belong to Vîra-Chôla (No. 62), to Vikrama-Chôladêva (No. 63), to "the emperor of the three worlds Kulôttuṅga-Chôladêva, who was pleased to take Îram (Ceylon), Madurai (Madura), the crowned head of the Pâṇḍya king, and Karuvûr" (Nos. 60 and 61), and to Kônêrinmai-konḍan (No. 66). The last name signifies: he who has assumed the title "the unequalled among kings" and occurs elsewhere as the surname of various Chôla and Pâṇḍya kings.

SÔMÛR.—Near the village of Sômûr, seven miles east of Karuvûr, there is a small deserted temple called *Sômêśvara*, the walls of which are covered with Chôla inscriptions. The most ancient among them is a defaced fragment of Madirai-konḍa Kô-Parakêsarivarman (No. 68). The remaining inscriptions, two of which were copied (Nos. 67 and 69), belong to Râjarâja and Râjêndra-Chôla and do not add any new historical details to the Tanjore inscriptions of these two kings. At the time of the inscriptions, the temple, which is now surrounded by fields, was situated in the hamlet of

Tirunômbalûr, which formed part of the village of Têvanappalli, probably the ancient name of Sômûr. About a mile from Sômûr, half a mile from the confluence of the Kâvêri and Amarâvatî rivers, and near the village of Achchammâlpuram, there is a temple called *Agastyêśvara*, which is almost entirely covered by drift sand, and which was partially exhumed by the villagers a few years ago. On the visible parts of the walls, only the beginnings of a few defaced inscriptions were found.

IRRIGATION WORKS.—On the route from Karuvûr to Tanjore, I visited two ancient native irrigation works near Muśîri and Vêttuvâyttalai. Muśîri is reached from Kurittalai Railway station by crossing the broad but shallow bed of the Koyêri in a round boat (*pariśal*) which consists of bamboo wicker-work covered with hides. The same kind of boats are used on the Tuṅgabhadrà near Hampe (Vijayanagara). At a short distance from the northern bank of the Kâvêri, a bridge spans the head-sluiice of a channel, which is now called Nâttuvâykkâl or Periyavâykkâl. On one of the side walls of the sluice, close to the bridge, is an inscription (No. 70) of Tribhuvanachakravartin Râjarâjadêva, which records that in the fourth year of his reign, *i. e.*, about A. D. 1219 (see *South Indian Inscriptions*, vol. I, p. 86), the head-sluiice (*vâyttalai*) was built of stone at Muśûri, *alias* Mummudi-Chôla-pêttai. The Kâvêri is referred to by the name "the large river (*pêrârû*) of Karikâla-Chôla. A remarkable piece of native engineering, which does duty to the present day, is the massive head-sluiice of the Uyyakkonḍân channel, which branches off from the Kâvêri near the Vêttuvâyttalai Railway station and supplies water to the town of Trichinopoly. One of the pillars of the sluice bears a modern inscription (No. 71) of Śaka 1608 (A. D. 1686), which is engraved over an erased inscription in ancient characters. On the bridge which crosses the head-sluiice is placed a stone, which is said to have originally formed part of one of the pillars of the sluice itself. This stone bears an inscription (No. 72) of "the emperor of the three worlds Kulôttuṅga-Chôladêva, who was pleased to take Ceylon, *etc.*," which records a gift made in the twenty-eighth year of his reign and refers to the head-sluiice (*vâ[y]ttalai*).

TIRUVÂRÛR.—On a short excursion from Tanjore, I stopped one day at Tiruvârûr. The Śiva temple of Tyâgarâjasvâmin is picturesquely situated on the eastern bank of a large square tank which, with its fine ghâts and the small island temple in its centre, reminds of the Teppakulam at Madura. Some defaced inscriptions of Râjarâja and Râjendra-Chôla are found on the walls of the small shrine of Achalêśvara, which may, therefore, be considered as one of the most ancient portions of the temple. The inscriptions on the *prâkâra* belong to the later Chôlas and Pândyas. The most interesting of these is one of the seventh year of Kô-Râjakêsarivarman, *alias* Tribhuvanachakravartin Kulôttuṅga-Chôladêva, which

records gifts to the images of four of the Śaiva saints whose lives form the subject of the Tamil *Periyapurāṇam*. These are:—Āḷudaiya-Nambi (*i. e.*, Sundaramūrti), his wife Paravai-Nāchchiyār, Āḷudaiya-Pillaiyār (*i. e.*, Tiruñānasambandar) and Tirunāvukkaraśudēvar. The inscription ends with two Sanskrit verses (No. 73), in each of which the king is called Anapāya. This enables us to identify Kulōttuṅga with the Chōḷa king Anapāya, during whose reign Śēkkirār professes to have composed the *Periyapurāṇam*. Another reference to the subject of the same work occurs in an inscription of the fifth year of Kō-Parakēsarivarman, *alias* Tribhuvanachakravartin Vikrama-Chōḷadēva. From a written copy, which my assistant prepared during the few hours at our disposal, it appears that the inscription relates to the legend of the calf which was accidentally killed by the son of king Manu-Chōḷa. The same legend is located at Tiruvārūr and told in other words in the introduction of the *Periyapurāṇam* (pages 10 to 12 of the Madras edition of 1888). A short Sanskrit inscription (No. 74) at a well called Śankhatīrtha in the temple courtyard declares bathing in this well on the full moon of Chaitra to be the cure for all diseases.

NEGAPATAM.—Among the temples at the seaport of Negapatam, the only ancient one is that of Kāyārōhanasvāmin, which is called Kārōṇam both in the inscriptions which it contains and in the *Periyapurāṇam*. The inscriptions belong to Rājarāja, Rājendra-Chōḷa and other Chōḷa kings. Just as the smaller of the two Leyden grants, the inscriptions mention Chōḷakulavallipattinam as another name of Nāgapattinam (Negapatam). On the coins struck by the Dutch while they were masters of the place, the spelling is Nāgapattanam. A solitary record of the times of the Dutch is a stone tablet at a small temple, which states that “this pagoda was built in 1777 A. D. under the auspices of the Governor Reynier van Vlissingen.” Mr. C. E. Crighton, of Negapatam, showed me a brass drum which had been lately dug out and which bears a short inscription in ancient Tamil and Grantha characters.

TRANQUEBAR.—The only ancient Hindu building at Tranquebar, the former Danish settlement, is a Śiva temple which is partially washed away by the sea. It contains an inscription (No. 75) of the Pāṇḍya king Kulaśēkharadēva, which mentions Tranquebar by the names Śadaṅṅanpāḍi and Kulaśēkharanpattinam, and the temple by the name Maṇivannīśvara.

MAISŪR.—On the 7th January 1891, I engaged H. Krishna Sastri as Kanarese Assistant. He was deputed to Śravaṇa Belgoḷa in the Maisūr territory from 11th to 22d February in order to take mechanical copies of some of the most important inscriptions, transcripts of which were published in Mr. Rice's recent volume. At the same time copies were taken of an inscription at Ātakūr, near Maddūr, which is incidentally noticed by Mr. Rice (*Inscriptions at Śravaṇa Belgoḷa*, p. 19 of the introduction,

note 10, and p. 21, note 5). This inscription is dated in Saka 872 (949 A. D.) and records that Kṛishṇarāja, "the bee at the lotus feet," i. e., the son, of Amôghavarshadêva, killed the Chôla king Râjâditya in a battle fought at Takkôla. Kṛishṇarāja is identical with the Râshṭrakûta king Kṛishṇa IV, whose grants range between Śaka 868 and 879. The large Leyden grant records that the Chôla king Râjâditya was killed in a battle with Kṛishṇarāja, whom I had identified with Kṛishṇa IV, before the Âtakûr inscription became known through Mr. Rice (*South Indian Inscriptions*, vol. I, p. 112, note 5). Thanks to Mr. Rice's discovery, there cannot now be the slightest doubt as to the correctness of this identification. In this way the conjectural date of the accession of the Chôla king Râjarāja (Śaka 927), who, according to the Leyden grant, was the youngest grandson of the youngest brother of Râjâditya, is indirectly confirmed, as 927-872=55 years would be a reasonable period for covering the reigns of the five Chôla kings who ruled between Râjâditya and Râjarāja. The irregular succession of these five kings (see the pedigree on p. 112 of *South Indian Inscriptions*, vol. I) proves that the time of their reigns was one of continual fights between different pretenders to the throne, none of whom appears to have enjoyed the sovereignty for any length of time, until matters became more settled at the accession of the great Râjarāja.

About a few copper-plate inscriptions which were examined during the last months, I beg to subjoin the following particulars:

No. I is an inscription on five copper-plates, for the loan of which I am indebted to the Superintendent, Government Central Museum, Madras. The character is Tamil and Grantha. Both the beginning and the end of the inscription are lost. The plates are strung on a ring which bears a well-executed seal. The chief figure on the seal is a seated tiger—the emblem of the Chôlas—in front of which are two fish—symbols of the Pândya kings. These three figures are surrounded by a bow—the emblem of the Chêra king—at the bottom, a lamp on each side, and a parasol and two chauris at the top. Round the margin is engraved a Sanskrit ślôka in Grantha characters, which may be translated as follows:—"This is the matchless edict of king Parakêsarivarman, which teaches justice to the kings of his realm." The full name of the king is found at the end of the first side of the first plate: Kô-Para-Kêsarivarnam, *alias* Uttama-Chôladêva. The legend Uttama-Chôlan is engraved in Grantha characters on both faces of a gold coin, and the legend Uttama-Chôla in Nâgarî characters on the reverse of a silver coin (Elliot's *Coins of S. India*, 151, 154). The edict was issued in the sixteenth year of his reign to confirm the contents of a number of stone inscriptions which referred to certain dues to be paid to a temple of Vishnu at Kachchippêdu.

SOUTH INDIAN INSCRIPTIONS.—The following review by Mr. R. Sewell of Dr. E. Hultzsch's first volume appears in the January number of the *Journal of the Royal Asiatic Society* :—

The appearance of the first volume of inscriptions of Southern India, by the Epigraphist to the Government of Madras, has long been looked for with interest, for though Dr. Hultzsch is not as yet well known to the British public, that section of it which has given attention to Indian Archæology and History has been anxious that he should justify his position. We venture to think that there will be no disappointment on this score. That Dr. Hultzsch has not been hasty in publication is merely a proof of the thoroughness of his work, for his quarterly reports to the Government of Madras show conclusively that he has never flagged in his labors. Slowly and laboriously, but with extreme care, he has begun to build up the fabric whose construction has been entrusted to him. The history of Southern India can only be safely written when the most has been made of the immense mass of material available. . . .

The net historical result of the present volume may thus be stated. It contains some of the earliest known inscriptions of the Pallavas from the Seven Pagodas and Kanchipuram. It fixes the date of a later branch of the Pallavas. It extends our knowledge of the dynasty of the Eastern Chalukyas, consolidates the already known pedigree of the first Vijayanagar sovereigns, and fixes with great probability the dates of several Chola kings, besides affording further information regarding the Udaiyars. The Pallava inscriptions at Mamallapuram (the Seven Pagodas) and Saluvankuppam are in no less than four different alphabets, extending over about six centuries, from the fifth to the eleventh century A. D. Dr. Hultzsch has been the first to discover that the numerous short inscriptions in very archaic character on one of the *rathas* are *birudas*, or titles, of the Pallava king Narasimha, who appears to have hewn the temple out of the rock. Inscriptions in a later character show that the Pallava king Atyantakama excavated some of the other rock-temples at the Seven Pagodas, and that Atiranachanda cut the Saluvankuppam Cave. No less important are the ancient Pallava inscriptions at Kanchipuram, said (p. 8) to have been discovered by Dr. Burgess in 1883.¹ From these we get the name of Rajasimha, after whom the most important of these temples was called, his son Mahendra, and his father Lokaditya, and it is shown by fresh evidence that the West-

¹ See, however, Mr. Sewell's paper in the *Journal of the Royal Asiatic Society* for 1884 (Vol. xvi, New Series, p. 33). He had noticed them in May, 1883, and pointed out in that paper that the old temples on which the inscriptions appear constitute the only known specimens of structural temples identical in style with the rock-cut temples at Mamallapuram, and probably of the same date. Dr. Burgess's visit was subsequent.

ern Chalukya king Vikramaditya II did actually, as was previously believed, enter Kanchi, and visit the temple built by Rajasimha Pallava.

Dr. Hultzsch's synchronistic table of Chalukyas and Pallavas is most useful. No. 32 of the inscriptions in the volume is a curious and interesting one from an octagonal pillar at Amaravati, which was deciphered by Dr. Hultzsch very shortly after his arrival in India. It has to be read upwards from bottom to top instead of downwards, and it contains a list of seven Pallava kings. An inscription from Trichinopoly gives a new Pallava name. Dr. Hultzsch's table of the Eastern Chalukyas is fuller and more trustworthy than any yet published, and his discovery of the erroneous nature of certain preconceived theories respecting the transfer by intermarriage to the Chola dynasty of the territories ruled over by those sovereigns is of much interest and value. The inscriptions he publishes are all on copperplates.

From the country about Madras are published 48 Tamil and Grantha inscriptions, most of which are valuable for one reason or another, but, as before mentioned, facsimiles are greatly wanted. The Udaiyar inscriptions in the volume do not greatly assist us with regard to that, probably usurping, dynasty. They appear to clash with those of another branch of the family, for it may well be that princes of the same clan established independent sovereignties in the south during the disturbed period which marked the rise of the great kingdom of Vijayanagar. The author publishes additional information on the later Chola dynasty, but as regards the Vijayanagar sovereigns there is little new, though what there is is useful as consolidating previous theories.

We entirely commend the plan of the work, as well as the way in which it has been carried out, with the single exception of the absence of facsimiles.

MATHURA.—NEW JAINA INSCRIPTIONS AND SCULPTURES.—Dr. Bühler writes from Vienna (Jan. 25): "About eight months ago I gave in the *Academy* (April 19, 1890, p. 270) an account of some of the results of Dr. Führer's excavations made in the Kankáli Tila at Mathurá during the working season of 1889-90. This year Dr. Führer has begun his operations much earlier, and his kindness enables me to report progress already. He arrived at Mathurá on November 15; and on December 27 he sent me impressions of nineteen new inscriptions, varying apparently from the year 4 of the Indo-Scythic era to the year 1080 after Vikrama, some of which possess even a greater interest than those found in former years.

"The most important new document is incised on the left portion of the base of a large standing statue, of which the right half is still missing. Most of its letters are very distinct, and I read it as follows:

"L. 1. *Sam* 70[+]8 *rva*[*va*] 4 *di* 20 *etasyaṁ purvāyaṁ Koliye* [*Kottīye*?] *gane Vair-dya śākhāya*.

"L. 2. *ko Arya-Vridhahasti arahato Nan*[*d*]*i*[*d*]*artasa pratimāṁ nirvartayati*.

"L. 3. *śya bhāryāya śrāvikāya* [*Dindāye*] *dān*[*a*]*m pratimā Vod*[*dh*]*e thāpe devanir-mite pra*.

Each line seems to be complete. It is, therefore, evident that the pieces wanting between l. 1 and l. 2, and at the beginning and the end of l. 3, must have stood on the right half of the base. This side, too, must have had three lines; and it is not difficult to restore some portions of them conjecturally, according to the analogy of other inscriptions.

"With explanations and restorations the translation will be:

"In the year 78, in the fourth (*month of the*) rainy season, on the twentieth day—on that (*date specified as*) above, the preacher Arya-Vridhahasti (*Ārya-Vridhahastin*) [*the pupil of . . .*] in the Koliya [*Kottīya*?] Gana, in the Vairā Śākhā (*Vajrā Śākhā*) [*and in the Thāniya kula*] orders to be made a statue of the Arhat Nandiāvarta. The statue, the gift of the female lay-disciple Dinā (*Dattā*), the wife of . . . , has been set up at the Voddha (?) Stūpa, built by the gods."

"The first point of interest which the inscription offers is the name of the Arhat. The Jainas know of no Tīrthamkara Nandiāvarta; but the symbol, called Nandyāvarta, is the distinguishing mark of the eighteenth prophet, Ara. This person is undoubtedly meant; for in the mixed dialect of these inscriptions Nandiāvarta may stand either for Sanskrit *Nandyāvarta* or *Nāndyāvarta*, and *arahato Nandiāvartasa* may be translated 'of the Arhat, whose (*mark*) is the Nandyāvarta.' This explanation confirms the discovery, which I announced in the *Vienna Oriental Journal* (vol. iv., p. 328), that the distinguishing marks of the various Tīrthakamkaras were perfectly settled in the first century of our era. The list of Tīrthamkaras, worshipped in the two ancient temples under the Kankālī Tīla (*ibid.*, p. 327), receives also a new addition.

"Still more important is the information conveyed in l. 3, that the statue was set up at, *i. e.*, probably within, the precincts of 'a Stūpa, built by the gods.' The sculptures, discovered at Mathurā by Dr. Bhagvānlāl Indrāji and Dr. Führer, left no doubt that formerly the Jainas worshipped Stūpas. Yet, the assertion that there was a Jaina Stūpa at Mathurā teaches us something new, and hereafter will prove very important; for, as stated in my letter to the *Academy* of April 19, 1890, Dr. Führer has found a Stūpa in the immediate vicinity of the two temples. He declared it to be Buddhistic, because he discovered close to it a seal with a Buddhist inscription, and I accepted his conjecture. Now the point becomes doubtful. It can be decided only when the Stūpa has been opened and its surroundings have been completely explored. Even more valuable is the statement

that the Stûpa was *devanirmita*, 'built by the gods,' i. e., so ancient that at the time when the inscription was incised its origin had been forgotten. On the evidence of the characters the date of the inscription may be referred with certainty to the Indo-Scythic era, and is equivalent to A. D. 156-7. The Stûpa must therefore have been built several centuries before the beginning of the Christian era; for the name of its builder would assuredly have been known if it had been erected during the period when the Jainas of Mathurâ carefully kept record of their donations. This period began, as the inscriptions show, with the first century B. C., to which Dr. Bhagvânâlâl's inscription of the pious courtesan *Dandâ* undoubtedly belongs. Dr. Führer's new inscription thus furnishes a strong argument for the assumption that one Jaina monument at Mathurâ is as old as the oldest known Buddhist Stûpas. With respect to the name of the Stûpa, which is contained in the word immediately preceding *thâpe*, I am not prepared to give any decided opinion. The first syllable is perfectly distinct, but the lower part of the second is somewhat blurred.

"Another of the new inscriptions, which unfortunately is not well preserved, gives the names of *maharâja devaputra Huksha*. Huksha probably stands for Huvishka or Huviksha, as an inscription of Dr. Führer's batch of 1890 reads. It is interesting because it proves that the form Hushka, which occurs in the *Râjataranginî*, and survives in the name of the Kâsmîrian town Ushkar or Hushkapura, is genuine and ancient.

"A third inscription is dated in the year 112, during the victorious reign of the supreme lord and superior king of great kings, Kumâragupta, and furnishes the last missing Sâkhâ-name of the Kottiya Gana, Vidyâdhari, in its Sanskrit form. The date probably corresponds to A. D. 430-1, and falls well within the known limits of Kumâragupta's reign. It is interesting to note that even so late a document shows a few Prakrit forms, mixed with otherwise very good Sanskrit; and it is significant that it is the first found at Mathurâ on which the title *âchârya* occurs. The monk, at whose request a statue was dedicated, bore the name Datilâchârya. The discovery of an inscription with a certain Gupta date will force us to exercise great caution with respect to dates which are not accompanied by the names of kings. They can be assigned to the Indo-Scythic period only if the characters are decidedly archaic. This circumstance makes me unwilling to speak with confidence regarding the age of a very interesting fragment, dated in the year 18, fourth month of the rainy season, tenth day, which records the dedication of a statue of divine Arishtanemi, the twenty-second Tîrthamkara. The letters look to me somewhat more modern than those of the inscriptions which undoubtedly belong to the Indo-Scythic period. The way in which the date is given, on the other hand, agrees with the usage of those early times.

"Some other fragments confirm information contained in the earlier found inscriptions, or allow us to make small corrections in their readings. There are fragments of five lines of a longer metrical Praśasti, showing beautifully cut characters of the Gupta period; and, finally, a small complete Praśasti in Devanāgarī letters, which consists of one Aryā verse and one Anushtubh, and is dated Samvatsarai (*sic*) 1080, *i. e.*, Vikramasamvat 1080. This last discovery proves, like that of two images with the dates Samvat 1036 and 1134 found in 1889, that these ancient temples were used by the Jainas during the greater part of the eleventh century, and that their destruction certainly happened in very late times.

"When I add that Dr. Führer has again found numerous and fine pieces of sculpture, it will not be too much to say that the results of his work during the season of 1890-91 are in no way inferior to those of previous years, and that the small sum allotted to these excavations has really been spent to good purpose and in the interest of Indian history."—G. BÜHLER, in *Academy*, Feb. 7.

A later letter from Dr. Bühler reports: "Since I wrote my letter of Jan. 25, Dr. Führer has sent me impressions of more than forty Jaina inscriptions found in the Kankālī Tila during January and February 1891, as well as some interesting notes regarding his archæological discoveries. His newest epigraphic finds possess as great a value as the previous ones. While the inscriptions printed in my last letter proved the existence of a very ancient Jaina Stūpa, two among those since discovered teach us something about the age of the Jaina temples at Mathurā.

"On a beautiful carved Torāṇa there is a brief dedication, in characters which appear a little more archaic than those of Dhanabhūti's inscription on the gateway of the Bharhut Stūpa. More archaic are (1) the letters *da* and the vowel *ī*, which exactly resemble those of Aśoka's inscriptions; and (2) the position of the Anasvāra, which stands, as in Aśoka's edicts, after the syllable to which it belongs. Dhanabhūti dates his inscription (*Indian Antiquary*, vol. XIII, p. 138) in the reign of the Ś'ungas and thus shows that he was their vassal. On this account he cannot be placed much later than the middle of the second century B. C.; for, though the Ś'unga dynasty continued to exist much longer, its power seems to have been restricted in later times to the eastern districts north of the Ganges. Dr. Führer's new inscription may, therefore, likewise be assigned to about 150 B. C. It is written in an ancient Prakrit dialect. . . . Its text runs as follows: *Samanasa Māharakhitāsa āmtevasīsa Vachhīputrasa s[r]āvākāsa Utaradāsak[ā]sa pasado-toranam[.]*? 'An ornamental arch of the temple (the gift) of the layman Uṭtaradāsaka, son of the (mother) of the Vātsa race (and) pupil of the ascetic Māgharakṣita.'

"A second inscription, incised in two lines on an oblong slab, gives us the name of the founder of one of the Kankālī temples. It says: *Bhadata-Jayasenasya āmtevāsintye | Dhāmaghoshāye dānam pāsādo[.]* 'A temple, the gift of Dharmaghoshā, the female disciple of the venerable Jayasena.' Its characters do not differ much from those used in the earliest dated inscriptions of the Indo-Scythic kings. The subscribed *ya*, however, has its ancient form, and consists of three vertical strokes. The language seems to be the mixed dialect, as the genitive *Jayasenasya* has the Sanskrit termination, while three words show Prakritic endings. I would assign this document to the period immediately preceding the Indo-Scythic times, and assume that it was incised about the beginning of our era.

"As two temples have been discovered under the Kankālī Tila, the natural inference from these inscriptions would be that one of them was built before 150 B. C., and the other considerably later. Unfortunately, another circumstance has come to light which requires a modification of this assumption. Dr. Führer has found several sculptures which have been carved out of more ancient ones. Thus, a pilaster bearing an inscription in characters of the Indo-Scythic period has been cut out of the back of an ancient naked Jina. Again, there is a small statue with a similar inscription cut out of the back of a sculptured panel, bearing on the obverse a rather archaic inscription. These facts prove that the Jainas of the Indo-Scythic period used for their sculptures materials from an older temple. Hence the discovery of the Torana, with its very archaic inscription, shows indeed that there was a Jaina temple in Mathurā before 150 B. C., but not that one of the particular temples of the Kankālī Tila necessarily dates from so early a period.

"A third inscription makes us acquainted with a new era, and it is interesting also in other respects. It is incised on a slab, representing a lady attended by several maid-servants, one of whom carries a parasol. After an invocation of the Arhat Vardhamāna, it records that an *Āyavatī* or *Āryavatī* (the word occurs twice in the text) was set up for the worship of the Arhats by a female lay-worshipper of the ascetics, Amohinī of the Kautsa race, wife of Pāla, the son of Hariti, *i. e.*, of a mother of the Hārīta race, in the year 42, or perhaps 72, of the lord (*svāmīsa*) and great Satrap *S'odāsa*. This lord and great Satrap *S'odāsa* is already known from No. 1 of Sir A. Cunningham's collection of Mathurā inscriptions (*Arch. Surv. Rep.*, vol. III., pl. XIII., and p. 30), where the transcript, however, misspells his name, and makes it *Saudāsa*. Sir A. Cunningham's inscription has no date according to years, but merely, after the name in the genitive, the unintelligible syllables *gaja*, which probably are meant for *raje*, 'during the reign.' On the evidence of his coins, which imitate one struck by Azilises, Sir A. Cunningham places *S'odāsa* about 80-70 B. C., and con-

jectures him to be a son of the great Satrap Rajubula. Though the precise date assigned to him by Sir A. Cunningham may be doubted, it is yet not doubtful that he ruled before the time of Kanishka. And Dr. Führer's inscription proves that an earlier era, preceding that of the Indo-Scythic kings, was in use at Mathurâ. With respect to the interpretation of the first figure of the date, I do not feel certain. The sign is the peculiar cross which Sir A. Cunningham everywhere reads 40. I have stated elsewhere the reasons why I believe that it was used also for 70. The other point of interest which the inscription offers is the word *Âyavati* or *Âryavati*. It is evidently the name of the royal lady represented in the relievo. As she was set up 'for the worship of the Arhats,' it follows that she must have played a part in the legendary history of the Jainas. A fuller exploration of the stories alluded to in the Uttarâdhyayana and similar works will no doubt show who she was.

"Three other inscriptions give new information regarding the subdivisions of the Jaina monks. One in archaic characters, not later than the Indo-Scythic period, and dated Samvat 18, mentions very distinctly the *Vachchhalijja* Kula. The Kalpasutra has two *Vachchhalijja* Kulas, one belonging to the Chârana (*recte* Vârana) Gana, and the other to the Kodiya Gana. I infer that the *Vachchhalijja* Kula of the Kodiya Gana is meant. If that is the case, all the Kulas and S'âkhâs of this school, mentioned in the Kalpasûtra, have been identified in the Mathurâ inscriptions.

"Another very archaic undated inscription, which begins with an invocation of divine Usabha, *i. e.*, the first Tîrthamkara Rishabha, names the Vârana Gana and the *Nâdika* (or possibly *Nâdika*) Kula. The third rather modern-looking inscription ascribes to the Vârana Gana an *Ayabhyista* Kula.

"Dr. Führer's new inscriptions furnish also further evidence regarding the antiquity of the worship of the twenty-four Tîrthamkaras. The occurrence of the name Usabha has already been noted. Two other archaic inscriptions speak, one of a statue of the Arhat Parśva, *i. e.*, Pârśvanâtha, and the other of *bhagavâ Nemiso*, *i. e.*, the divine lord Nemi. The latter words are incised, according to Dr. Führer's notes, on a panel bearing a very curious relief. The principal figure is a Buddha-like male *with a goat's head*. He is seated on a throne and surrounded by women, one among whom holds a child in her arms. I think there can be no doubt that we have here again an illustration of a Jaina legend. Among the remaining very numerous sculptures without inscriptions—several of which, according to Dr. Führer, are beautifully finished—there is one which apparently possesses very considerable archæological interest. It is a door-

step, bearing a relief, which represents a Stûpa worshipped by Centaurs and Harpies, or, as the Hindus would say, Kinnaras and Garudas or Suparnas. Centaurs have been found on the Buddhist sculptures at Bharhut and at Gaya, while Mathurâ has furnished the Silenus groups and the Hercules strangling the Nemean lion. Dr. Führer's find is a further addition to the monuments which prove the influence of Hellenistic art among the Hindus of the last centuries preceding our era.

"In his last letter Dr. Führer states that he expects to finish the excavation of the Kankâli Tila in about three weeks. I have, however, not received any news that he has really come to an end of his labors, and I expect that ere long I shall be able to announce further discoveries; but, even at present, the results of the work of 1890-91 far surpass those of other years, and there is very good reason for congratulating Dr. Führer on the important additions to our knowledge of Indian history and art, which we owe to his energy and perseverance."—G. BÜHLER, in the *Academy*, April 18.

TANJORE.—Mr. Rea reports from Tanjore on Feb. 19, to the Chief Secretary, Madras.

After the Christmas holidays, the staff went into camp at Tanjore, and began the survey of the great temple there. This work is now almost complete, and includes other usual series of plan, sections, elevations, details of the architecture and ornament, and a number of photographs. The temple dates from the 11th century and is the most ancient of the important large temples of Southern India.

Dr. Thurston informs me that the Amarâvati marbles, which I excavated some time ago, have arrived in the Museum. Arrangements should be made for having them placed in a suitable position.

ANNAM.

DISCOVERY OF THE CAPITAL OF ANNAM.—M. Hamy communicated to a recent meeting of the *Acad. des Inscriptions* (Feb. 27) the result of the researches made by M. Dumoutier on the right bank of the Houang-Giang, near the frontier of the Thanh-Hoa. He found there the ruins of Hoa-Lu, the first capital of Annam, founded in about 970 A. D. by the king of the "ten thousand victories," Dinh Tien Hoang, the conqueror of the Chinese. The remains of the destroyed city consist in causeways, defensive ditches, palace terraces, etc. M. Dumoutier has also identified two temples, consecrated to the worship of the royal families of Dinh and of Lê, and the tomb of King Dinh, on the summit of a high calcareous cliff. He has found the inscription of the latter monument and a large number of epigraphic texts of which he is at present making translations.

PERSIA.

PARTHIAN CHRONOLOGY.—M. Oppert communicated to the *Acad. des Inscr.* (on Feb. 13) a cuneiform text bearing the name of Gotarzes, king of the Parthians, with the double date of "the year 161, which is the year 225." Contrary to the opinion that this date was to be calculated according to the era of the Seleucidae, M. Oppert dates these two eras of the cuneiform texts at the years 117 and 181 B. C. This is confirmed by the text just mentioned, for the date mentioned would thus be 45 A. D., which is known to be the date of King Gautarzes.

ARABIA.

MINAEANS AND EGYPT.—Dr. GLASER's last discovery is a very interesting one, and confirms the antiquity which he assigns to certain of the inscriptions found in the South of Arabia. One of these, which was copied by M. Halévy, states that it was inscribed by order of two Minaean governors of Tsar and Ashur, and expresses the thanks of the authors to the gods for their rescue from the war between the kings of the North and of the South, as well as for their deliverance in Egypt at the time of the war between Egypt and Madhi. Tsar and Ashur have already been identified by Prof. Hommel with Tsar, the chief fortress on the Asiatic frontier of Egypt, and the Ashurim of Southern Palestine. Dr. Glaser at first supposed that Madhi was the Edomite tribe Mizzah; but he now points out that the name must be identified with that of the Mazai of the Egyptian texts, who first appear in the time of the XVIII dynasty as nomad hunters, and subsequently formed a corps of the Egyptian army, while in the kings of the North and South we must see the Hyksos prince who held his court at Tanis, and the native princes of the XVIII dynasty who ruled at Thebes. The inscription, therefore, will go back to the period when the war broke out between Apophis and Ta'a, which eventually led to the expulsion of the Hyksos kings.—*Academy*, Jan. 31.

ANTIQUITIES FROM YEMEN.—The Turkish Government has purchased a number of antiquities discovered in Yemen, which were owned by private individuals. They consist mainly of marble statues, figures of animals, and several stones inscribed with Aramean characters. Antiquities from Yemen are likely to be important, and further information concerning the Aramean inscriptions will be awaited with interest by scholars.—N. Y. *Independent*, Feb. 12.

MIDIAN.—AN ANCIENT CITY.—Dr. Friedmann has just returned to Cairo from an expedition to Midian, where he has been surveying the country with a view towards settling in it some of the Jewish refugees from Russia. In the neighborhood of Aynúnah he has found the remains of an ancient

city, as well as a stone on which the name of "Isis the great goddess" is written in hieroglyphics. He was told that many inscriptions on rocks exist at a little distance in the interior of the country.—*Athenæum*, Jan. 17.

BABYLONIA.

TELLO=SIRPURLA.—**CHRONOLOGY OF ITS RULERS.**—M. Heuzey has communicated to the *Acad. des Inscriptions* (March 20) some new historic data drawn from a study of the early Chaldaean monuments found by M. de Sarzec at Tello, the ancient Sirpurla. Already by their aid a considerable list of the ancient kings and *patesi*, or priest-rulers, of this city had been established. Its lacunae are being filled in gradually. The two *patesi*, Our-Baon and Nam-magh-ni, predecessors of Goudéa, had been hitherto isolated: M. de Sarzec has joined together the fragments of a stone cup, consecrated by a woman who calls herself both the wife of Nam-magh-ni and the daughter of Our-Baou. This is the first example of succession through women in the dynasty. Another dedication, engraved on a similar cup gives a new and unclassified *patesi*, Our-Ningoul. Several texts also show that the very early sculptured monument known as the *stele of the vultures* was erected by a prince named E-anna-dou, who calls himself sometimes king, sometimes *patesi* of Sirpurla. He was son of A-kourgal, himself king and *patesi*, already known as having succeeded his father, Our-Nina, the earliest Asiatic ruler whose name is confirmed by the monuments. A stone tablet makes it possible to follow another branch of the *patesi*, the most ancient of whom En-anna-dou I (who must not be confounded with E-anna-dou) is called "the elder son" of King Our-Nina and father of the *patesi* En-tê-na, who is represented at Tello by an entire series of constructions: this "elder son," however, does not figure on the official lists of the sons of Our-Nina.

From all his researches M. Heuzey concluded that the *patesi* do not differ as much as was supposed from the ancient kings from whom they descended directly.—*Rev. Arch.*, 1891, 1, pp. 241-2.

THE PARENTAGE OF QUEEN TEIE.—Prof. Sayce writes to the *Academy* (Jan. 20): "One of the cuneiform tablets from Tel el-Amarna, now at Berlin, and recently published in the *Mittheilungen aus den Orientalischen Sammlungen* (III, No. 188) seems at last to solve the problem of the nationality of Queen Teie, the mother of the 'Heretic King' of the XVIII dynasty. The tablet begins as follows: 'To my son thus speaks the daughter of the king: To thyself, thy chariots [thy horses and thy people] may there be peace! May the gods of Burna-buryas go with thee! I go in peace.' Burna-buryas was the king of Babylonia, and it is difficult to account for the mention of his name except on the supposi-

tion that he was 'the king' whose daughter the writer was. Teie, however, is hardly a Babylonian name; it is probable, therefore, that it was given to the princess on her marriage with the Egyptian monarch. That this was the case with Mut-m-ua, the mother of Amenôphis, we now know from the tablets of Tel el-Amarna, which inform us that she was the daughter of the king of Mitanni. Why the mother of Teie should be called Tu'a on the famous scarab of Amenôphis III is an unsolved mystery. Tûya is the name of an Amorite in one of the Tel el-Amarna letters, and Toi was the king of Hamath in the time of David."

THE LEGEND OF ETAN-GILGAMOS AND HIS KINDRED IN FOLKLORE.—Mr. Harper writes to the *Academy*: "The letters in the *Academy* in regard to the legend of Etan-Gilgamos and his kindred in folklore have furnished a surprising mass of material for comparison. Since giving the translation of the Etana legend I have joined two more small fragments of the legend which relate that Etana went to the eagle and repeated his request for the birth-plant. Thus we learn that Samas referred him to the eagle for help. . . . The healing power of the eagle appears in other oriental legends. The eagle is the wise bird, the healer, and the enemy of serpents; and all of these characteristics appear in the eagle of the Etana legend.

"The king of the Garudas, referred to by Dr. Richard Morris (*Acad.*, Apr. 4), who lives far to the north of the ocean, and who divides the sea by flapping his wings in order that he may eat the dragons, belongs apparently to the class of mythological animals, birds, bulls, etc., which arise from the personification of clouds, winds, and the forces of nature. We find such a personified wind in the Babylonian legend of *Adapa and the Southwind-bird*. The text is published in Winckler's *Thontafelfund aus Tel el-Amarna* (II, p. 166) . . . The hero Ada(ta)pa is unknown outside of this legend. He is a demi-god; for although he is the son of Ea, his name is written with the determinative of a man. 'It seems that Adapa was out fishing for the family, when the Southwind came up and overwhelmed him with the waves. In anger he broke its wings, and as the Southwind does not any longer blow over the land, Anu, the god of heaven who has the winds in his service, inquired of his messenger, the god Ila-abrat [O God, though art strong (?)], for the reason. Ila-abrat replied that Adapa had broken the wings of the Southwind, which news made Anu very angry. Ea perceives at once that it will go hard with his son, and contrives a plan by which he may appease the angry god. He directs his son to clothe himself with mourning, and thus secure the sympathy of Anu. Ea also relies on his friends Tammuz and Izzida, who are watchers at the gate of heaven, to speak a good word for his son. He further tells Adapa that when he is brought before Anu food and drink, a garment, and oil will be given him. The two latter he may use, but

must not touch the food and drink, as they will bring death. When Adapa arrives at Anu's gate, everything comes to pass as his father had predicted. When Anu inquires why he has broken the wings of the Southwind, he explains the matter as best he can.'

"The end of his speech is mutilated, and we do not know what excuse he offered. It had the desired effect, however, and Anu gives up his wrath. He orders a banquet to be spread for Adapa, and furnishes him with food and water of life. Adapa, however, remembers the injunction of his father, and refuses to partake. Thereupon Anu laments over him. Why has he not eaten? He has missed his chance of becoming immortal.

"The Southwind appears in the inscriptions as one of the messengers of the god Anu. With the other winds it stands at the side of the great storm-god Ramman. It was the most dreaded of all the winds by the Babylonians, as it swept up from the sea and caused those terrible tidal waves which more than once devastated the southern portion of the valley of the Euphrates. This Southwind bird is closely connected with other gods of the Babylonian mythology. The Stormcloud was personified as the bird Zu, who in the legend (*Chal. Gen.*, p. 103, ff.) robs the morning sun of his insignia. The translation in *Chal. Gen.* fails to bring out the meaning of the legend. A son of Zu is the raincloud bull (IV. R., 23, 1), which is described as a great bull—a mighty bull—which treads the shining pastures, makes the fields rejoice, and sends down showers upon the earth. There is here a large field for comparison with Vedic mythology, in which winds and clouds are also represented as bulls and cows.

"Tammuz and Izzida are both gods of the under-world, and their appearance here as watchers at the gate of Anu is remarkable, though not without parallel in the Babylonian myths. The Babylonian astrologers gave many of their gods, even those which belonged to the under-world, seats in the heavenly bodies. Tammuz is the well-known youthful spouse of Istar, who gave his name to the month June-July; Izzida is the god of the following month, July-August (*DEL. Ges. Baby. u. Assy.*, p. 69).

"The recurrence of the incidents and ideas of this and the Etana legend in so many different forms, among so many different peoples, shows how much the story-tellers of later nations have been indebted to the Babylonians for the myths and legends with which they embellished their literature and glorified their heroes.

"The tablet before us is also exceedingly interesting from another point of view. It was found at Tell el-Amarna in Egypt, and is dotted over with red ink marks, made apparently by the Egyptian scribes, who puzzled themselves over its contents. In style it differs strikingly from the other legends. The stereotyped formulas for introducing the speakers are lacking, and the parallelism is much less carefully carried out. How it came to

be among the letters of the Babylonian kings, and what interest the Egyptians felt in such Babylonian tales, are questions which further study of the Tell el-Amarna tablets may enable us to answer."—EDWARD T. HARPER, in *Academy*, May 30.

SYRIA.

TUNIP AND THE LAND OF NAHARINA.—*Bentcliffe, Eccles*, Dec. 29, 1890. "In the Egyptian accounts of the wars of the kings of the XVIII and XIX dynasties against the Khita, mention is several times made of a town Tunip, whose exact locality is a puzzle. Wiedemann in more than one place says it was near Damascus. Brugsch, on the other hand, identifies it with Daphne, close to Antioch. I cannot think that either of these sites, which are a considerable distance apart, satisfies the conditions of the problem.

"In the friezes preserving a version of the epic story describing Rameses II's battle at Kadesh, a town which is admitted to have been situated on some enlargement of the Orontes, and probably on the lake of Homs, the two spies are made to tell Rameses that the king of the Khita had withdrawn from Kadesh, and was then 'in the land of Khilibu [*i. e.*, Aleppo] to the north of Tunip.'

"It seems to me that this phrase necessitates our putting Tunip somewhere between Kadesh and Aleppo. Now it is a curious fact that, in the inscriptions describing the campaigns of this period, I cannot find the name of Hamath at all; and it seems to me that Tunip was in all probability the Khita name of Hamath, where several inscriptions have occurred proving it to have been a seat of Khita power. This identification would satisfy, I believe, all the conditions necessitated by both the Egyptian and the Assyrian texts where the name Tunip occurs.

"This is not all. Tunip in one place is called 'Tunip in the land of Naharina.' It has been usual to identify the Naharina of the Egyptian texts with the Mesopotamia between the Tigris and the Euphrates. I believe this to be an entire mistake. Naharina is no doubt the Naharain of the Old Testament, and means the land of the rivers; but the rivers which bounded it were not the Euphrates and the Tigris, but the Euphrates and the Orontes. Brugsch reports that a learned traveller, a friend of his, informed him that the Arabs are still accustomed to call the fertile country to the west of Damascus which is watered by many rivers by the very same name of Naharain (Brugsch, *History of Egypt*, I, 292).

"I believe also that it is here, and not in Mesopotamia, that we must put the Aram Naharaim of the Bible narrative. This clears up a difficulty. Aram Naharaim was also called Padan Aram in the Bible narrative. Now in the inscriptions of Shalmanezar (900–860 B. C.) a tribe Patena is placed in the Orontes valley and the watershed separating it from the Euphrates;

and these Patena have been identified as the people of Padan Aram and of Batanaea or Bashan by Rawlinson."—HENRY H. HOWORTH, in *Academy*, January 17.

PALESTINE.

ANCIENT TOWNS IN PALESTINE IN EGYPTIAN DOCUMENTS.—Professor Sayce writes to the *Academy*: "Some of the letters from Palestine [in the Tell-el-Amarna series] are sent from places which are elsewhere mentioned only in the geographical list of Thothmes III., at Karnak. Thus, one of them (No. 153) is written by Pu-Dadi the governor of Yurza, the Yarza of Thothmes (No. 60) which Brandes and Mr. Tomkins identify with Khurbet Yerzeh, eleven miles S. S. W. of Mujedda; another comes from Tubikhi (No. 171), which had been attacked by the Tyrians. Tubikhi is the Tubkhu of Thothmes (No. 6). It is not noticed in the Old Testament, like Khasabu, the Khashbu of Thothmes (No. 55), the governor of which alludes to the city of Kinza and the country of Am in Phœnicia, which had been invaded by the Hittites. In the list of Thothmes the name of Khashbu is followed by that of Tasult, unnamed in the Old Testament, but evidently the Tusulti of the Tell el-Amarna tablets (189, 193). Tasult is associated with Anukhertu, the Anaharath of *Josh.* XIX. 19, in what was afterwards the territory of Issachar. Quddasuna, 'the sanctuary' (Tell el-Amarna, No. 170), throws light on the Qitsuna of Thothmes (No. 4); and the Maskha of Thothmes (No. 25) may be the Musikhuna of Tell el-Amarna (Nos. 130, 192), of which the Mittanian Sutarna was governor. How much assistance may be derived from a comparison of the list of Thothmes with the tablets can be judged of from a single instance. The list mentions a place near Ta'anach called Gentu-asna or Gath-Ashan (No. 44). Now one of the Tell el-Amarna letters was sent by the governor of the city of *ti-as-na. One character has been lost at the beginning of the name, and the vacant space would just be filled by the sign which has the value of *gim*. Gimti-asna would be the correct Assyrian form of Gath-ashan.

"The tablets illustrate the North Syrian list of Thothmes as well as his Palestinian list. Thus the governor of Gebal, Ilu-rabi-Khur ('a great god is Horus'), states (No. 91) that the country of Am was threatened by 'the king of the country of the Hittites and the king of the country of Nariba.' Nariba must be the Nereb of the North Syrian list (No. 189) which Mr. Tomkins has identified with Nerab, south-east of Aleppo. It may be added that Am, also called Ammiya, is probably the Ummah of *Josh.* XIX. 30; and that Mr. Tomkins is shown to be right in extending the Egyptian empire to the eastern side of the Jordan, since one of the Tell el-Amarna letters (No. 132) is from Artama-Samas, the governor of Ziri-Basani or 'the plateau of Bashan.' The latter name explains that of Zarbasana,

which is found in an Egyptian stela of a prime minister of Merenptah, whose native Syrian name was Ben-Matsana, of the land of Zarbasana (see Mariette: *Catalogue Général des Monuments d'Abydos*, Paris, 1880, p. 421, No. 1135)."

SOUTHERN PALESTINE IN THE FIFTEENTH CENTURY B. C.—Mr. Sayce writes to the *Academy*, Jan. 20: "I have been studying the tablets of Tell el-Amarna which relate to the affairs of Southern Palestine, and have been published in the third and concluding part of the *Mittheilungen aus den orientalischen Sammlungen*.

"The publication reflects the highest credit upon the administration of the Royal Museum at Berlin, and more particularly upon Messrs. Winckler and Abel. The publication, like the readiness of the authorities in the Cairo Museum to place the tablets they possess at the disposal of scholars, suggests unfavorable comments on the conduct of the British Museum, which still withholds from Assyriologists that portion of the collection which has been purchased by the British public. Until we know what it contains, the information given us by the tablets in the possession of the Ghizeh and Berlin Museum, as well as of private individuals, must necessarily remain incomplete.

"I have, in the first place, to correct a reading which I published in the *Academy* last year. The local name of the deity worshipped on 'the mountain of Jerusalem,' according to Ebed-tob, the governor of the city, was not Marru, but Salim. The character must be read as one, and not divided into two. The name reveals to us the origin of the name of Jerusalem itself. A cuneiform tablet long ago made us acquainted with the fact that *uru* signifies 'city,' the Assyrian *alu*; Uru-Salim, or Jerusalem, therefore, must be 'the city of Salim,' the god of Peace. We can thus understand why Melchizedek, the royal priest, is called 'king of Salem' rather than of Jerusalem; and we may see in the title, 'Prince of Peace,' conferred by Isaiah on the expected Saviour, a reference to the early history of the city in which he lived.

"The letters sent by Ebed-tob to Egypt are long and interesting. He tells us that he had succeeded to his royal dignity, not by right of inheritance, nor by the appointment of the Egyptian king, but in virtue of an oracle of the god who is called in Genesis El Elyón. At the same time he was a tributary and 'vassal' of Egypt, and the district of which Jerusalem was the capital, and which extended on the west to Rabbah and Mount Seir (*Josh.* xv. 10), and on the south to Keilah and Carmel, was 'the country of the king' of Egypt; who had established his name in it 'for ever.' Like the other vassal princes of Canaan, who had been allowed to retain their local titles and authority, Ebed-tob was compelled to admit an Egyptian garrison within the walls of his city, and from time to time

to receive the visits of an Egyptian 'Commissioner-Resident.' One of the Commissioners mentioned by Ebed-tob was Pa-uru, whose stele has lately been discovered on the site of Mesides and printed by Mr. Wilbour. Another was Khapi, or Hapi, the son of Miya-Riya, or Meri-Ra, and the father of Amenôphis, who erected the famous colossi at Thebes. A third Commissioner mentioned by Ebed-tob is Suti, in whom we should probably recognize the Egyptian Seti. The Egyptian Commissioner at the same period in the district afterwards occupied by the tribe of Issachar was Aman-khatbi, the Amen-hotep of Egyptologists, whose name Prof. Maspero is shown to be correct in reading Amun-hotpu.

"Where the native prince had been displaced, as at Lachish or Megiddo, the town was under the jurisdiction of a *Khazan*, or Egyptian 'governor.' In many cases the governor bears a Canaanitish name, and must therefore have belonged to the subject population. It would have been better if in all cases the local prince had been superseded by a governor, as the princes were perpetually quarrelling with one another and sending counter accusations to the Egyptian court. Ebed-tob, for instance, complains that Malchiel and Su-yardata had seized part of his territory; and Su-yardata replies that Ebed-tob had tampered with the men of Keilah. Malchiel was a governor, the seat of whose power seems to have been Gezer. Gezer had been 'entered' by a certain Labai ('the lion') who writes a humble letter to 'the king,' his 'lord,' to explain why he had done so, as well as to answer the accusations brought against him by Ebed-tob.

"Most of the letters appear to have been written towards the end of the reign of Amenôphis IV, when the Egyptian empire was already beginning to fall to pieces. The Hittites were threatening Northern Canaan, the "Plunderers," or Beduin, were overrunning the central part of the country as far south as Ajalon and Zorah (Zarkha), while Southern Palestine was assailed by the Khabiri, or 'Confederates,' under their leader, Elimelech. There were constant complaints that one or other of the vassal princes had joined the enemy. Thus, the king of Hazor in the north is said to have gone over to the Beduin, and the sons of Labai (who in one of the letters is stated to have attacked Megiddo) are accused of conspiring with the Khabiri. A suggestion has been made to identify the latter with the Hebrews, but the historical situation makes this impossible; and since the word means 'Confederates' in Assyrian, it is better to see in them the confederated tribes who met in their common sanctuary at Hebron "the Confederacy." We know from the Old Testament that Hebron was inhabited by a mixed population, Amorite, Hittite, and probably, also, Canaanite; and the only explanation of the fact that the name of Hebron does not occur in the letters of Ebed-tob, although his territory extended to the south of it, must be that it was in other hands. Ebed-tob declares again and again that the

country and governors of the Egyptian monarch are perishing, and that if no additional troops are sent 'this year,' 'the country of the king' will be lost to him. There is no record that the troops arrived; on the contrary, it is probable that Amenôphis died shortly after the despatch of the last of the letters of Ebed-tob. The Khabiri were allowed to continue their victorious career, and possibly to capture Jerusalem itself. At all events, when the Israelites entered Canaan, a century later, they found the city in the possession of the Amorite Jebusites, and Ezekiel tells us that its father was an Amorite and its mother a Hittite."—A. H. SAYCE, in *Academy*, Feb. 7.

JERUSALEM.—DESTRUCTION OF THE SILOAM INSCRIPTION.—The Council of the Palestine Exploration Fund has received information that the famous Siloam inscription has been cut out of its place in the rock and carried away. It was broken in removal, and the fragments are reported to have been sold to a Greek in Jerusalem. Fortunately we possess an accurate copy of this inscription, made (we believe) by Mr. Sayce.—*Academy*, Jan. 24.

TELL-EL-HESY=LACHISH (or Gath?).—PHœNICIAN INSCRIPTION.—By far the most interesting object found in the excavations at Tell el-Hesy, in Palestine, last winter, was a fragment of pottery bearing a Phœnician inscription of a single word; the interpretation of that word, its position in the strata of the mound, and the age of the terra-cotta, would or ought to go far toward determining the identification of the site. But, strangely enough, Mr. Petrie declared in his report that he found not a single inscription at Tell el-Hesy; and it was Professor Sayce who told of it in the *Academy*, reading its characters *le-Samek*, "Belonging to Samech" (a deity or a person), and declaring the letter *samech* therein to be "of a peculiar form, more archaic than any hitherto met with in Semitic epigraphy." The full report of Mr. Petrie was awaited to clear up the mystery; but, when the October *Statement* of the Palestine Exploration Fund came to hand it only added to the paradox, for Mr. Petrie remained silent as to this inscription, and yet an illustration of it was thrust into the midst of his text, on p. 230, without a word of explanation apart from the subscript "Inscribed Fragment of Pottery from Tell Hesy." Finally, when a special monograph on Tell el-Hesy was announced by the Fund, it was expected that the matter would certainly and fully be cleared up. And now this quarto volume has appeared; and, greatly to the disappointment of every one who cares a whit about the ancient place and its history, nothing whatever is said about the "Inscribed Fragment," either by Mr. Petrie or by any other writer for the Fund; yet the same illustration in the October *Statement* is inserted as a tail-piece at the end of Mr. Petrie's memoir! Naturally, if Mr. Petrie does not wish to recognize it, because apparently he does not believe in it, why should the officers of the Fund put it in their official publications withholding, at the

same time, all information respecting it? Of course it was to be expected that Major Conder would have his interpretation to offer, and that it would differ from Professor Sayce's—indeed from every or any other one for that matter; and it presents itself in the *January Statement*. Instead of the archaic character claimed by Professor Sayce, Major Conder makes it out to be Aramaic, and from certain gems of that alphabet, he selects parallel letters indicating an equivalent to לחי in Hebrew, and signifying "To your health," the assumption being that the potsherd is a fragment of a water-jug. But the inscription must have either dedication or ownership for its motive. Almost immediately after the publication of Mr. Petrie's report in the *July Statement*, and Professor Sayce's articles contributed to various journals in England and America, Prof. J. A. Paine argued, in the *Bibliotheca Sacra* for October, the rendering "To Samek" suggests the Semachiah of the Bible, who was a grandson of Obed-edom the Gittite, and forms one of four indications going to show the site, Tell el-Hesi, to be Gath instead of Lachish. Is it possible that both Mr. Petrie and the managers of the Fund also perceive the bearing of this inscription, and do not wish to confess they have made a mistake?—*N. Y. Independent*, May 14.

MR. PETRIE'S REPORT.—The Palestine Exploration Fund have issued Mr. W. M. Flinders Petrie's account of his excavations last spring at Tell el-Hesi, the site of Lachish. The work is published in demy quarto, uniform with his volumes of Egyptian exploration. It is illustrated with a large number of lithograph plates, showing the pottery of various dates, architectural details, etc.

NEW EXCAVATIONS.—The committee of the Palestine Exploration Fund have obtained from the Porte a renewal of the firman, giving them authority to excavate in the Holy Land; and Mr. F. J. Bliss, son of the president of the American College at Beirût, has been appointed to continue the work begun last spring by Mr. Flinders Petrie at Tell el-Hesi, the site of Lachish.—*Academy*, Jan. 17.

A HEBREW MANUSCRIPT.—The Rev. Dr. Adler has acquired a valuable manuscript containing the *Siddur* (the weekday, Sabbath, and festival prayers) according to the rite of Yemen. It is written in square characters with the Assyrian punctuation. The rubrics are in Arabic written in Hebrew characters. The codex contains many poetical compositions taken from the Divâns of Jehuda Halevi, Abraham ibn Ezra, Moses ibn Ezra, and Isaac Gayath, which have never been printed. Other interesting features of the ms. are the *Megillath b'ne Chashmonai* (the Roll of the Hasmoneans) in Aramaic, containing an account of the Maccabees, and an elaborate treatise on the calendar, which proves its date to be 5233 A. M.=1473 A. D.—*Athenæum*, Jan. 31.

ASIA MINOR.

PROFESSOR RAMSAY'S SUMMER EXPLORATION.—Professor Ramsay and Mr. Hogarth propose to visit Eastern Kappadokia again this year. Prof. Ramsay will start very shortly, and make a preliminary tour in Kilikia, in the hope of clearing up certain doubtful points with regard to the discoveries of the expedition of last year and of Mr. Theodore Bent. Mr. Hogarth (who will probably be accompanied by Mr. Munro) will go out to Tarsos as soon as the Oxford term is over, and there join Prof. Ramsay; and the party will cross the Tauros and make for the Euphrates. Their plan is to explore the Kurd country north of Malatia, and follow the river up as far as Nikopolis, whence they will either turn westwards to the rock-cities of Boghaz-Keui and Eyuk, or go northwards into Pontos. In any case they hope to come out on the Black Sea. Two very different problems await solution in this country: the character of the early race which is responsible for the Hittite sculptures and inscriptions; and the scheme of the Roman frontier defences. It is hoped that the expedition of this year may make discoveries which will elucidate both problems, if they manage to avoid troubles with the Kurds and the ever-present fever.—*Oxford Magazine*, in *Academy*, May 16.

From later advices we learn that Professor Ramsay was attacked with fever soon after starting and has been obliged to return to England, leaving Mr. Hogarth to carry out the projected journey.

APAMEA (Dinair).—**ROMAN RUINS.**—In Apamea of Phrygia, the modern Dinair, there have been found in a garden south of the city marble fragments of all sorts—parts of columns, architraves, and other architectural members—also a number of inscriptions, which have been published in the *Athen. Mittheil.*, 1891, 1, pp. 146–8.

LAODIKEA (on the Lykos).—**DISCOVERIES IN THE NECROPOLIS.**—The *Néa Σμύρνη*, 1890, No. 4216, announces that in the necropolis of Laodikea on the Lykos in building the railroad many objects in gold, marble and terracotta were found, three of which were confiscated, among them a terracotta group of good period similar to those of Myrina. A white marble vessel is described as being of early-Christian style, among whose reliefs is a representation of Eve, one of Charon, of Jonah, of the Ephesian Artemis. The third object mentioned is a bronze amulet in the form of a cross. These three, together with a portrait bust kept at Denisli, are to be sent to Constantinople.

Two inscriptions from Laodikea are published in the *Athen. Mittheil.*, 1891, pp. 144–146.

MAGNESIA (on the Maiandros).—Dr. DÖRPFELD has returned to Athens from Magnesia, and reports that the German School has explored the whole

enclosure of the Temple of Apollo, in which many inscriptions were found. Around it stood porticoes and buildings for the functionaries of the sanctuary. The excavations at the theatre have proved its resemblance to the theatre of Tralleis, and that it was altered in Roman times.—*Athenæum*, Feb. 21.

NYSÄ.—GREEK INSCRIPTIONS.—Near Nysa, in Phrygia, Messrs. Von Hüller and Kern have discovered a Greek inscription containing three documents of the time of the Mithridatic war, viz., two letters from King Mithridates and one of Caius Cassius, governor of the Roman province of Asia. They will be published by Professor Mommsen in the next number of the *Athenische Mittheilungen* of the German School at Athens. Appian always styles this Cassius, Lucius; but it would seem incorrectly. All three parts of this inscription refer to a certain Chairemon of Nysa and his sons. In the letter of the Roman general, Chairemon, a friend of the Romans, appears as making a gift of corn to the Roman army, and he is warmly thanked. The two letters of Mithridates offer a reward to whoever takes Chairemon and his sons, dead or alive, since they, as friends of the Romans, are enemies to himself. Chairemon with his sons took refuge first at Rhodes, afterwards in the asylum of the Temple of Artemis at Ephesos.—*Athenæum*, May 2.

OMARBEILI.—A STATUE OF NERO.—In Omarbeili near Eirbeli, between Magnesia and Tralleis there was found a headless military statue, two met. high, on a base with the following inscription in two lines: Νέρωνα Κλαύδιον θεοῦ | Κλαυδίου Καίσαρος υἱόν. The emperor wears a coat of mail decorated with two griffins facing one another with a row of small aglets beneath which are the usual leather bands, showing the undergarment. Over it slung to the girdle is a garment, partly covering the griffins, which Rohden (*Bonner Studien*, p. 5) had traced back only to the time of Hadrian. The feet have sandals and the mantle hangs from the shoulder. The head, the right arm (which has since apparently been found, Νέα Σμύρνη, 1890, No. 4255) and the left fore-arm are wanting. There is brown color on the breastplate and red on the sole. The right leg is supported on a tree-trunk with a horn of plenty. The statue has been taken to Smyrna.—*Athen. Mittheil.*, 1891, p. 148.

KRETE.

MOUNT IDA.—ARCHAIC ANTIQUITIES.—On Mount Ida some peasants have found fragments of bronze votive shields, lamps, and archaic *figurini*, similar to those discovered at the shrine of Zeus a few years ago. It would appear that there are other grottoes in the mountain, now being searched in a disorderly fashion by the shepherds and peasants, which also contain votive offerings.

ARVI.—Other unauthorized diggings are now going on at Arvi, identified by Pashley as the site of the temple of Jupiter Arbius, where, according to

Spratt, was found "the elaborately sculptured sarcophagus presented by Admiral Sir P. Malcolm to the Cambridge Museum, and figured in the first volume of Pashley's work."—*Athenæum*, May 16.

MYKENAÏAN WARE.—Sig. Paolo Orsi has published a treatise on Cretan urns of the Mykenaiian style (*Urne funebri Cretesi dipinte nello stile di Micene*) and Dr. Furtwängler in presenting it at the January meeting of the *Archäolog. Gesellschaft* in Berlin, called attention to the fact that it illustrated an entirely new kind of Mykenaiian ware. In one urn the sloping roof is of especial interest in illustrating the construction of houses of the Mykenaiian period, and equally so is the beginning of a use of profiles. The style of the paintings is in harmony with the theory that the so-called Græco-Phœnician vases of Cyprus are immediate successors of the Mykenaiian.—*Woch. f. Klass. Phil.*, 1891, No. 9.

EUROPE.

GREECE.

THE BRITISH MUSEUM PAPYRI.—Since the British Museum published the text of the *Ἀθηναίων Πολιτεία*, attributed to Aristotle, from the papyrus ms. which lately came into its possession, inquiries have been made as to the nature of the other unpublished papyri of a literary nature which are now in the possession of the Museum, although they are not of such extraordinary interest as rumour had for some time been asserting. A volume containing their texts, or, in the case of works already known, collations of their texts, will appear shortly.

1. Homer, *Iliad*, II 101–IV 40. A papyrus of late date, which has been in the possession of the Museum for some years, but has not yet been published. It is in book form, not a roll, and on three of the blank leaves is written part of a work on grammar, entitled *Τρύφωνος τέχνη γραμματική*.

2. Homer, *Iliad*, III, IV, fragments. A late papyrus, containing about sixty lines of book III and the greater part of book IV.

3. Homer, *Iliad*, XXIII and XXIV, fragments. An early ms., perhaps of the first century B. C. It consists of a multitude of small fragments, but portions of most of the lines in both books survive.

There are also some other unimportant fragments of Homer, *Iliad*, I, V, VI, XVIII.

4. The first half of the third epistle of Demosthenes, in a minute and very early hand.

5. On the same roll of papyrus at the last, the conclusion of an unknown oration, which has not been identified with certainty, but may be the speech of Hyperides against Philipides.

6. The oration of Isocrates, *De Pace*. The first half is fragmentary, but the rest is complete.

7. Seven poems (with fragments containing the titles of two more) of the almost unknown writer Herodas. The poems are short, averaging about a hundred lines each, in scazon iambics, and mostly consist of humorous sketches of every-day life. The ms. is a somewhat late one.—*Athenæum*, Jan. 31.

Since the above was put into type the volume has been issued, under the editorship of Mr. F. G. Kenyon, aided by Messrs. Rutherford, Sandys, Hicks and Jebb. It contains, in addition to the fragments here named, a portion of an abridgment of what seems to be Tryphon's *Ars Grammatica*, written on the *verso* of papyrus No. CXXVI. There are nine excellent auto-type plates of facsimiles. With this volume and former publications, named in the preface, all the papyrus mss. of literary works in the British Museum have now been given to the world.

HANDBOOK OF GREEK ARCHÆOLOGY.—Mr. A. S. MURRAY, keeper of Greek and Roman Sculpture in the British Museum, is engaged on a handbook of Greek Archæology, which will treat in detail, and with many illustrations, of sculpture, vases, bronzes, gems, terracottas, and mural paintings.—*Academy*, May 16.

AN ITALIAN SCHOOL.—The Greek government has granted a piece of land for the proposed Italian School at Athens. The site chosen is near the military hospital, and not far from the buildings of the British and American Schools.—*Academy*, Sept. 20.

THE ARTIST KRESILAS.—At the last *Winckelmannsfest* (Dec. 1890) Prof. Furtwängler enumerated a number of works which should be attributed to the artist Kresilas. These are: (1) the well-known herm of Perikles; (2) the statue of the wounded Amazon, ascribed to him by Jahn, the three statues preserved being probably part of a votive monument at Ephesos; (3) a marble head in the Berlin museum (*Ant. Skulpt.* 311) similar in style and conception to the Perikles; (4) the Diadoumenos whose head is in Kassel and Dresden, which has no connection either with the Polykleitian or the Farnese Diadoumenos, and whose body is preserved in two small copies (terracotta, *J. Hell. St.* 1885, pl. 61: marble, Berlin); (5) a youthful helmeted head of Ares, known from numerous replicas (e. g. in the Louvre, *Arch. Anz.* 1889, 57), whose body is probably repeated in a statue of the Villa Borghese; (6) a Diomedes in Munich (*Glypt.* 162), attributed on independent grounds to Kresilas both by Löschcke and Studniczka; (7) the so-called Alkibiades in the *Sala della Biga* at the Vatican, perhaps the statue of a runner; (8) the Athena Velletri in the Louvre and its replicas; (9) the Rondanini Medusa in the Glyptothek (Munich) where the artist's individuality is very apparent; (10) a Diadoumenos head in the Petworth collection, a

late and elegant work of the master. There is so strong a relationship between all these works that they cannot be explained otherwise than as the work of a single artist. These traits are especially shown in the form of the eye, the structure of the forehead, the style of the hair, the shape of the lower face and its expression, as well as in the appearance of both body and drapery and finally in the size of the head. This artist was certainly influenced by Polykleitos, but internally he comes closer to Myron from whom he also borrowed some external traits. The works thus confirm what Brunn had recognized from literary evidence.—*Woch. f. Klass. Phil.* 1891, 6.

THE ARTIST THRASYMEDES.—Kavvadias in the *Δελτίον* (Apr.–May) shows that he arrived independently at the conclusion reached by Gurlitt (*Arch.-Epigr. Mittheilungen*, xiv, p. 126) that the Thrasymedes mentioned in the Epidaurian inscription Έφ. Άρχ. 1886, p. 145 ff. as having undertaken decorative work in the temple is identical with Thrasymedes of Paros who made the statue of Asklepios.

THE PAINTING OF GREEK SCULPTURE.—At a meeting of the *Société des Antiquaires* on Feb. 18, an interesting discussion took place regarding the painting of Greek sculpture. M. Nicard adopted the opinion of Petronius who affirms that it is a mistake to bring forward a passage of Plato in support of the theory that Greek statues were completely painted; whereas, according to M. Nicard, painting was used only for accessories. M. Collignon referred to Plato's mention of encaustic painting on statues, to the inventories of the Erechtheion mentioning them and to traces on Asiatic statues. M. Guillaume referred to the fact that the statue of Augustus was entirely painted and M. Martha recalled the complete painting of terracottas.

ARGOLIS.—ARCHAIC INSCRIPTION.—An important ancient Greek inscription has been found in Argolis, in archaic letters of peculiar shape, with dialectic forms analogous to some forms of Cretan archaic dialect.—*Athenæum*, May 16.

ATHENS.—THE PEIRAIÆUS.—While the excavations in the Roman *agora* have for some time ceased, the work of lengthening the Peiræus railroad has already given some archæological results. In the neighborhood of the Theseion the trenches have not been dug deep enough to lead to any discoveries, but near the station of the railway which is being built between the Demarchy and the Πλατεία Ὁμονοίας something has been found. In the first place there were uncovered a large number of ancient tombs made especially of roof-tiles, which confirm the placing of the ancient city wall a little south of the Demarchy. It can thus easily be recognized from the strata of earth in the deeper graves that north of the city walls there used to be a valley-like depression with a small rivulet whose existence might have already been conjectured from the horizontal curves of Kiepert's

plan. Some walls of various periods and uncertain use also came to light.—*Athen. Mittheil.* 1891, p. 140.

THE AGORA.—A considerable and very well-preserved part of the Agora has been uncovered but the greater part of the ruins remain hidden under the old mosque which at present serves as military bakery.—*Chron. des Arts*, 1891, No. 7.

SITE OF THE THESEION.—Dr. DÖRPFELD has communicated to the German Institute at Athens his opinion that the newly discovered "Constitution of Athens" furnishes us with an important topographic indication for the real position of the Theseion. The present so-called Temple of Theseus at Athens was, according to Dr. Dörpfeld, most probably the Temple of Hephaistos, mentioned by the ancients as existing in the *Kolonos agoraios*. From the papyrus-text, however, it seems likely that the Theseion was on the north-west slope of the Akropolis.—*Athenæum*, April 4.

A WORK BY BRYAXIS.—In the continuation of the railway a pedestal was found bearing on three sides reliefs representing a horseman and a tripod, on the fourth side the inscription:

Φυλαρχοῦντες ἐνίκων ἀντιπασίᾳ
 Δημαίνετος Δημέο Παιανιεύς
 Δημέας Δημαινέτο Παιανιεύς
 Δημοσθένης Δημαινέτο Παιανιεύς
 Βρύαξις ἐπόησεν.

On the pedestal is a raised arch with a hole in it, perhaps to fasten a tripod or a column. This pedestal is described and discussed by Kavvadias and further discussed by Lolling. It was probably (with the object upon it) an early work of Bryaxis, before he was engaged with Skopas in adorning the Maussoleion. It commemorates not one joint victory of Demainetos and his two sons, but three victories.—*Δελτίον*, Apr.-May, 1891.

THE KERAMEIKOS.—The General Commission began to excavate in the Outer Kerameikos, northwest of the Dipylon. Three layers of graves were found. The lowest and earliest belongs to about the 7th century B. C. Here the bodies were buried, not burnt. Vases of the "Dipylon" style were found in and on these tombs. Two small lions of Egyptian porcelain with hieroglyphics, and ivory figures of nude women of oriental workmanship also occurred.

The second stratum belongs to the times before the Persian invasion. Here the bodies were burnt.

The third stratum belongs to times not later than the fourth century B. C., and the bodies were not burnt.

Besides the objects in and upon the tombs, many fragments of pottery were found. One *ostrakon* is inscribed *Χσανθίππος Αρρι . . .*, evidently a witness to the ostracism of the father of Perikles.

The *Δελτίον* for April–May reports that in the outer Kerameikos further tombs were excavated. One tomb resembled that of Vourva. Several “Dipylon vases” were found.

INSCRIPTIONS.—In excavating for the underground continuation of the railway from the present station to the Place de la Concorde several inscriptions were found. One is dedicatory, belonging to the end of the third century B. C., and is here published. In the same place were found three decrees inscribed on one slab, and several other decrees. In four of these decrees the *temenos* of *Demos and the Graces* (τοῦ Δήμου καὶ τῶν Χαρίτων) is mentioned, the site of which is therefore now fixed. These inscriptions are all published and discussed by Dr. Lolling in the *Δελτίον* for April–May. Two inscriptions are in honor of Eumaridas son of Pankles of Kydonia. They bear the dates of the archons Heliodoros and Archelaos, who seem to have held office in 217 and 216 B. C. respectively. The third decree on the same slab is in honor of Charmion, son of Eumaridas, and his son Eumaridas. The date is the archonship of Phanarchides, probably early in the second century B. C. The fourth decree is in honor of Nikeratos, son of Nikeratos, of Alexandria. Ptolemy is mentioned as Στρατηγὸς ἐπὶ Κύπρου, which fixes the date before 173 B. C. The fifth is in honor of Timarchos of Salamis and belongs to nearly the same date, as do also the other fragmentary decrees found in the same place.

Besides publishing and discussing the inscriptions mentioned above, Lolling publishes and discusses the following in the *Δελτίον* for April–May :

Γάιον Καρρεῖναν Γαίο[υ υἱὸν Σεκοῦνδον φιλο-
καίσαρα τὸν ἐπώνυμ[ον] ἄρχοντα καὶ ἱερέα

Δ[ρο]ύσου [ὑπάτου

[ἣ ἐξ Ἀρείου πάγου βουλῇ καὶ ἡ βουλὴ τῶν X]
καὶ ὁ δῆμος κτλ.]

This C. Carinas was probably made archon for the year 66 A. D.

Letters of Hadrian and Plotina.—Professor Koumanoudis is going to publish a highly interesting inscription discovered in excavating the old market of modern Athens. So far as preserved the inscription consists of three parts: 1. A letter written in Latin by the widow of Trajan, the Empress Plotina, to her adopted son Hadrian. He is entreated in the name of the then head of the Epicurean School at Athens to promulgate an edict granting the privilege that the succession of the School should not be confined as hitherto to Roman citizens, but also be open to Greeks if among them men competent are found. 2. A letter of Hadrian's to Plotina in which he informs her that he concedes the privilege asked by her for the Epicureans. 3. A Greek letter of Plotina, in which she announces with pleasure to the president of the Epicureans, Popilius Theotimus, the

success of her mediation. She at the same time advises him to take care that only the most distinguished members of his school should be chosen as successors of Epicurus. This inscription, which for the first time informs us of the interest felt by Roman ladies of high rank in the Epicurean philosophy, widely diffused of course at Rome among the men, will be published by Prof. Koumanoudis in the journal of the Athenian Archæological Society.—*Athenæum*, Jan. 17.

ADDITIONS TO THE NATIONAL MUSEUM.—The *Δελτίον* reports as follows the additions to the National Museum.

Oct.—The National Museum received 17 numbers from Rhamnus, chiefly fragmentary sculptures and inscriptions; eleven numbers from the tomb in Petretza, chiefly ceramics; vases and fragments from the tomb at Marathon; a marble hydria and a headless stone dog from Laurion.

The numismatic museum has been transferred to the Academy under the charge of J. Svoronos.

Nov.—Dec.—The National Museum received a large number of vases from various places. Bacchic subjects seem to predominate. The museum also received a few coins, and a variety of objects from the excavations at Thespiæ and at Lykosoura. Those from Thespiæ are chiefly small bronze objects and coins; those from Lykosoura chiefly fragments of sculptures.

The arrangement of the National Museum and the work and the catalogue have been progressing during the year. The collection of Egyptian antiquities given by Johannes Demetrios is to be arranged in the National Museum.

Jan.—Feb.—The National Museum was increased by 99 numbers, including a collection of 79 numbers, chiefly vases, presented by Stavros Andropoulos. One vase (Dumont, *Céramiques de la Grèce*, I, pl. 18) represents the combat of Herakles with Busiris; another black-figured Achilles lying in ambush behind a fountain, when he is discovered by Polyxena, and a third the metamorphosis of the companions of Odysseus. The museum also received 8 numbers (vases and terracottas) from Thorikos, nine (chiefly lekythoi) from Vari, the Plotina inscription (*Εφ. 'Αρχ.* 1890, p. 141), a relief from Larissa with traces of color, and the Naxian relief of the birth of Christ (*Εφ. 'Αρχ.* 1890, p. 19).

The work of arrangement and cataloguing goes on in the museum.

March.—The museum received two life-size marble heads and a sepulchral urn bearing the inscription Πιστόδωρος Ἀπολλόδωρος Ἑρσιάδαι and a relief of two men greeting each other.

April.—May.—The museum received a sepulchral marble hydria with relief, and three other reliefs, two of which are of Roman times.

DELPHOI.—By the Bill presented to the Greek Parliament, in consequence of the acceptance of the convention between France and Greece

regarding the excavations of Delphoi, the cottages and other immovables in the Commune of Kastri will be evacuated, and the occupants compensated by a sum to be paid by the French Government. The Greek Government only pledges itself to secure the inhabitants a sum of 60,000 drachmas. The French acquire the right to excavate in the whole of the district. Every object found belongs to the Greek nation, the French retaining the right for five years to make casts, and priority in publication of the results of the excavations. After the conclusion of the explorations the lands abandoned fall to the Greek Government.—*Athenæum*, April 4.

EPIDAUROS.—NEW EXCAVATIONS.—The *Δελτίον* (Jan.—May) announces that excavations were commenced at Epidaurus by the Archæological Society under the charge of P. Kavvadias in order to complete the discoveries about the temple of Asklepios. The foundations of a Doric peristyle, apparently belonging to an inner court, were found; a part of these foundations had been subsequently covered by the erection of an Odeion of Roman date. According to the last report the *κοίλον* and orchestra of the Odeion had been completely excavated and the excavation of the stage was in progress.

ERETRIA.—EXCAVATIONS BY THE AMERICAN SCHOOL.—*History.*—The Eretria of ancient Grecian history is now known as Aletria, or Nea Psarà the latter name owing its origin to the Psariotes, who settled here during the early part of the present century. Excepting Chalkis, the present capital, Eretria, under various names, has always been the leading town on the Euboian Island. In 500 B. C. it was completely destroyed by the Persians under Datis and Ataphernes, because it had incurred the anger of Darius by assisting the Athenians in succoring Miletus. It was rebuilt in time to be represented by seven ships in the naval engagements of Artemision and Salamis. At the battle of Plataia also Eretria furnished a considerable number of hoplites. After the freedom of Eubœia from Athenian dominion it joined the Attic League and was active in the struggle against Macedonian supremacy. Since 198 B. C. the Romans, Turks and Greeks have successively possessed the whole island; and therefore Eretria.

City.—During the past winter the American School has been carrying on excavations and topographical investigations in the town. Three parallel streets, about a quarter of a mile in length, extending almost due north and south, intersected at right angles by three others somewhat shorter, comprise the present territory of Eretria; and four hundred people who live in one-story, tile-roofed huts represent its population. It is bounded on the south and west by the Euripos. A block of marble bearing an inscription in honor of a liberal citizen marks the site of an ancient gymnasium. A little to the north of the present town is the Akropolis, which on all sides except the southwest, is surrounded by well-preserved remains of beautiful

polygonal walls. There are also traces of a latter Grecian wall built of quadrangular blocks of stone. In several parts of these walls there is Roman patchwork.

Theatre.—Between the town and the Acropolis is an old theatre which heretofore was to be identified only by the artificial mound surrounding it, and a few of the stone seats that appeared above ground. In February the American School began excavations on this site, and has so far laid bare a large part of the stage, orchestra and seats. The stage is approximately nine feet high, and in the rear of it are five rooms. Its length is between fifty and sixty feet, and its breadth about seven feet. Its foundation is wholly of porous stone with superstructures of marble, some of which show that the theatre had been repaired and perhaps remodeled by different generations of the Greeks, and subsequently of the Romans. Below the stage-building is a low narrow platform, with an arch through the middle of the *skenengebäude* behind it. It is hoped that considerable light will be thrown by it on the construction of the Greek stage. The peasants, not knowing a better use to make of the marble remains found here, have long since burnt up the most of them—statues and inscriptions indiscriminately—in making lime to be used in the construction of their huts.

The most puzzling discoveries brought to light by our excavations have been two tunnel-like arches in the theater, the larger extending from the front of the stage under the third of the five rooms above mentioned, and the smaller, from the center of the orchestra circle toward the stage.

Another department of work, has been the tracing and measuring of the city walls, noting their towers, peculiarities of construction, the character and quality of the stones, and mapping everything of archeological significance. This work has quite satisfactorily proven that Old and New Eretria occupied the same extent of territory. The best remains of the walls and towers whose general character represents several periods of history are those immediately surrounding the Acropolis. Here the stones are polygonal, regular courses of masonry occurring only in the towers.

The graves of Eretria found along the "Sacred Way" to the East extend on either side for miles in regular lines. The place seems a burying ground for the whole region. Then the presence of the names of other cities on the tombstones shows that even strangers were brought here for interment. These graves are of all epochs. Sometimes as many as four were found, one above the other. A foot or two below the surface, are the poor Byzantine graves made of pottery. One slab is laid flat on the bottom of the grave, then two others lean together over the body forming an equilateral triangle. Just below these, sometimes only a few inches, appear the rectangular Roman graves, made of slabs of stone, well fitted, but often showing plain indications that the stones had been used in some previous

structure. Lower still, come the Greek graves of a good period, and lowest of all, six feet and more deep, the archaic ones.

While the archaic tombs have almost invariably an east and west direction, the next in order of time are frequently due north and south, and the Roman and Byzantine seem to be put at any angle which was most convenient.

In the Greek graves proper we made our richest find. For it is this series which in Eretria sometimes contains those wonderful white vases only found here and in Attica. Other kinds of vases, terracotta figures and masks, gold and silver ornaments are also numerous. The archaic graves yield a few archaic vases.

One grave, contrary to the rule, was not filled with earth, so the bones of the skeleton could be seen. Right where the breast of the figure had been, lay a mass of more than two ounces, more than two hundred gold leaves. Thin gold plate had been cut into the shape of oak and ivy leaves, and all the veins of the natural leaf were carefully marked upon them. There were six graves in this group. Two of them had been robbed in antiquity; but the grave on the opposite end of the structure, which corresponded in position to the one just described, contained a rich treasure.

A few vases of good Greek workmanship, a terracotta mask of the god Pan, and some terracotta statuettes came forth; and, the following morning seven gold crowns. With these were found two specimens of the stylus, and a pen which from its appearance might have been made fifty instead of twenty-three hundred years ago. Then, on the slab which covered the grave beside this, was an inscription stating that here was buried the daughter of an Aristotle. Soon it was rumored that this richest grave was that of Aristotle the Stagirite! Further excavation yielded less. But from one grave came a beautiful gold ring with a rampant lion as a seal. Another yielded ear-rings: two golden doves swinging in a hoop of gold. The eyes are of precious stones, the feathers of granulated gold work. Precious stones are set in the wings and the breasts, and the feathers of the tails are so arranged as to move as the pendant swings.

Perhaps the most interesting find, archæologically, are the white vases, the *lekythoi*, two of which are as fine as any known. They form an important link in the chain of evidence which shows the close connection which existed between Athens and Eretria. Were they made in Athens, and exported to Eretria, or did they come from an Eretrian studio?

To these must be added a marble head, and a marble statuette of excellent workmanship, a large number of vases of greater or less merit, several bronze dishes, and a few coins and terracottas. All these now rest in one of the private rooms at the Central Museum in Athens. Finally there were

found thirty-two epitaphs, which will be published in the JOURNAL.—N. Y. *Independent*, April 23 and 30.

THE GRAVE OF "ARISTOTLE."—The New York *Nation* publishes the following letter dated Athens, March 12: "Contrary to my wishes, the news has already leaked into the papers here that I have discovered the grave of Aristotle. As I am very anxious that no sensational report be spread, not warranted by conscientious scientific investigation, I feel bound to make public at this juncture the grounds upon which this premature conclusion has been arrived at.

"During the excavations which have been carried on by the American School of Classical Studies under my direction on the site of the ancient Eretria, I was making tentative excavations in the neighborhood of the city, in order to discover the temple of the Amyrinthian Artemis. I came upon beautifully worked marble foundations, which, however, proved to be the enclosures of a family grave, such as exist in considerable number about Eretria. But these walls were of such workmanship and magnificence that I concluded they must be the finest graves in the neighborhood. After much digging, and opening of two graves, we came upon one within this precinct which contained a number of articles (twenty-three), among them six diadems of pure gold and one laurel wreath of pure gold about the head; furthermore, a most interesting specimen of a writing-pen in silver, and two styluses of the same material; also a statuette of a philosopher, with hands folded, in terracotta.

"It seemed evident to me at the time that the person here buried was a man of literary pursuits, and furthermore a man of considerable note. When, in the grave adjoining, containing the remains of a female member of the family, an inscription was found, [B]IOTH [A]PIΣTOTEΛOY, the tempting question flitted through the mind, whether the gold-wreathed philosopher buried with such distinction was not the famous Stagirate? This grew still more tempting when one bore in mind that Aristotle died at Kalchis in the adjoining city to Eretria. Finally, Christodoros describes a statue of Aristotle, which he saw in a gymnasium at Constantinople, as "standing with hands folded together," which corresponds to the unique terracotta found in the grave. According to Prof. Richardson, the inscription goes back to the third century B. C.

"This is an outline of the facts connected with the discovery. But I should like to refer to the following points which militate against the identification: first, that Kalchis is not Eretria, though it adjoins it, though graves run almost continuously from Kalchis as far as Bathia, two hours beyond Eretria, and though one must not assume that these were the same distinct and inimical communities after the Macedonian period which they were in the previous centuries. One must further remember that there

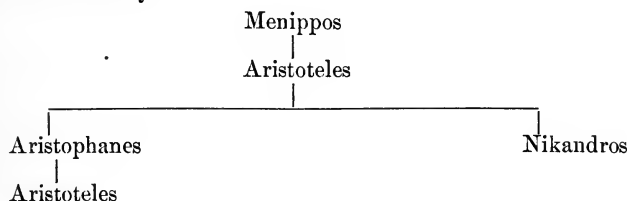
were several Aristotles in antiquity, and that the daughter of Aristotle by his wife Pythias is mentioned in his will, and that her name was Pythias, not Biote: though he might have a daughter by Herpyllis. Finally, research has not yet considered and settled the question whether the terracotta figures in graves had any such *direct* reference to the deceased as the statuette of the philosopher in the grave in question might tempt us to believe existed in this case; though we can, even now, maintain that a general relation subsisted, such as that of ephebi in graves of youths, children in children's graves, and women with articles of toilet in those of women.

"These are, on the whole, the facts which I can at present make public. Perhaps more light may come to us.

"CHARLES WALDSTEIN."

The real date of the Eretrian Aristotle.—We take the liberty of quoting the following from a private letter to the editor, as it may help to settle the question of the date of the Eretrian Aristotle and to make an identification with the philosopher impossible.

"I forgot to tell you the other day that probably his (Waldstein's) Aristotle has turned up in an Eretrian inscription. I have been saying that it was pretty sure to do so, if enough inscriptional matter were at hand, and this week I was turning over the Εφημ. Ἀρχ. for 1887 and came on a long list of names among which are two Aristotles (the name occurs four times) both from the same district. They would seem to arrange themselves in this way:



Tsuntas thinks the inscription belongs to the beginning of the second century B. C. but ran over a series of years. If the above table is right the Menippos-Aristoteles would go back quite as far as the father of Bioto; indeed might be the very man. Hence the philosopher theory may be safely laid upon the shelf of undigested notions."

KAMBOS.—BEE-HIVE TOMB.—A bee-hive (Οόλος) tomb has been discovered near Kambos in the deme Abia, a little southeast of Kalamata. The top has fallen in, and there is some hope that the tomb has not been plundered.—*Δελτίον*, March 1891.

MARATHON.—The *Δελτίον* for April–May reports that excavations were begun again in the tomb of the Athenians at Marathon with a view to

more complete investigations, after which the tomb is to be restored to its former appearance.

MEGALOPOLIS.—Excavations in the theatre have been renewed and will be reported in our next issue. Meanwhile the *Athenæum* of May 30 publishes the following letter: "In the last number of the *Journal of Hellenic Studies* was published a provisional plan of the theatre at Megalopolis, now in course of excavation by the British School at Athens. It will be remembered that the most interesting feature in this plan was formed by the *scena*; it is of fourth century structure, and is remarkably well preserved up to a certain height; and upon the way in which it is restored the whole question now in dispute with regard to the existence of a raised stage in the Greek theatres of early period may be said to turn. According to the restoration there given by the excavators, it was a raised stage in the strictest sense of the words, approached by a flight of six steps from the orchestra, and entered by three doors from the stoa behind it; thus it appeared to settle the question once for all. This restoration, especially as regards the existence of a raised stage, was disputed by Dr. Dörpfeld in the *Berliner Philologische Wochenschrift* for April 11th and 25th. He maintained that the structure of which they formed the basis must be restored as a high wall or colonnade—the *scena frons*. Instead of continuing our controversy, we wish to make public at once, in a common statement, certain facts which have, for the most part, come to light during the continuation of the excavations this spring. The English excavators wish to acknowledge that their significance was first pointed out by Dr. Dörpfeld during his visit to Megalopolis.

"1. The wall bearing the three thresholds must be of later date, both from the manner of its construction and from the fact that it has, built into its foundations, bases (*in situ*) corresponding to the bases of the stoa behind. This evidence for the height of the steps therefore disappears.

"2. Of the steps facing the orchestra, and restored as six in the provisional plan, the fourth and fifth have actually been found; but it appears that the lowest three steps were not part of the original plan, but were added in consequence of a change in the level of the orchestra. There may be a difference of opinion as to when this change was made.

"3. On the fifth or top step there are indications that columns have stood; some drums of columns lie near, and also some pieces of Doric frieze and architrave, which correspond in measure to the slabs of the steps. Dr. Dörpfeld therefore restores this step as a stylobate, carrying columns about 20 ft. high, with entablature to correspond.

"The English excavators wish to consider all this evidence carefully, and to search for more before expressing a final opinion as to all details, and as to the chronological relation of the various parts. They will also

require the assistance of an architect upon the spot before any final publication is possible, as the evidence is extremely difficult and complicated. They feel no doubt that there exists at Megalopolis the material necessary for determining the original plan of the *scena*; and in the *Journal of Hellenic Studies* for the current year the evidence in favor both of their view and of Dr. Dörpfeld's will be carefully sifted.

WILHELM DÖRPFELD.

ERNEST A. GARDNER.

W. LORING."

MYKENAI.—The excavations of the archæological society at Mykenai were discontinued in last December. On the Akropolis foundations of houses of the Mykenean epoch were found. In one of these were many bronze objects. A paved road leading from the Lions' gate to the upper part of the akropolis was discovered. A number of bronze utensils were found in a cistern. A bronze statuette of a man was found. Two tombs were found and investigated outside of the Akropolis. The entrance to one was adorned with color. In the other were found three gems (*Inselsteine*) with representations of animals (a lion pulling down a bull, an antelope wounded with a spear, a lion with his head between his legs).

The so-called tomb of Klytemnestra was afterwards investigated by the archæological society (conducted by Ch. Tsountas). Parts of the adornment of the entrance were found, and a drain running, apparently, the whole length of the *δρόμος*.—*Δελτίον*, Nov.—Dec., March.

NIAUSTA (near).—**A GREEK PAINTING.**—M. Heuzey announced on Jan. 16 to the *Acad. des Inscr.* that a Danish archæologist, M. Kinch, had discovered in Macedonia, near the city of Niausta, a Greek painting executed on the wall of a sepulchral chamber. It is well known how rare paintings of the classic period are in Greek lands. The subject is a combat between a horseman and a barbarian foot soldier. The costume of the horseman includes a second yellow tunic with narrow sleeves, under a blue Chiton with red border, a panther's skin used as saddle-cloth, a crimson helmet in the shape of a Phrygian cap, whose frontlet alone has the tone of gold or bronze. The foot-soldier has an almost black complexion; on his head is a white cap similar to a Persian *bashlik*, a green tunic with sleeves, red anaxyrides and an oval buckler. The painting is not of the first order, and appears to have been rapidly executed; but it is remarkable for its wonderful action and lifelikeness. The barbarian seems to cry out as he defends himself; the horse of the Greek, thin, nervous and full of fire, is galoping with great animation. The same characteristics are found in certain vase-paintings and in the battle scenes of Alexander carved on

the Sidon sarcophagi found by Hamdi-Bey: it is an indication of its age.—*Rev. Arch.*, 1891, 1, p. 114.

THEBES.—AN ARCHAIC RELIEF.—A relief representing a maiden with the archaic inscription *Αμφοττο* was found hidden in a house near Thebes.—*Δελτίον*, Jan.—Feb.

THORIKOS.—BEE-HIVE TOMB.—Investigations at Thorikos were carried on in December by B. Staes. A "bee-hive" tomb like that at Menidi was opened. Fragments of "Mykenai" pottery, two bronze fragments, bones, and ashes were found. The tomb had been opened before. In shape it was elliptical. The *δρόμος* was—in part at least—roofed over by a false vault formed by the projection of each course of stone beyond the course below. Near this was an elliptical structure, 4 m. long by 1½ m. wide, and 1½ m. deep, in form like a "bee-hive" tomb without a top. In this were many black-figured lekythoi and archaic terracottas. There was a sort of door at one end. The purpose of this enclosure is unknown. The objects in it were all broken. Perhaps the enclosure was a receptacle for broken votive offerings.—*Δελτίον*, Nov.—Dec., 1890.

TROIZEN.—All the antiquities discovered at Troizen by the French School have been brought together in a small shelter in the village of Damala. Exception was made, however, for the statue of the Hermes Kriophoros, which has been placed in the national museum at Athens. The importance of this latter sculpture consists in its forming a new type of its kind, different from the Hermes of the artist Onatas, where the goat is carried under the arm, and from that of the artist Kalamis, where it is carried on the shoulder. The Hermes of Troizen is clothed with the *chlamys* and wears the *petason* on the head; the left hand bears the *kaduceus*, and the figure is represented in the act of seizing by the horns the goat standing before it, and of raising it from the ground.—*Athenæum*, March 7.

ITALY.

PREHISTORIC AND CLASSIC ANTIQUITIES.

PREHISTORIC CITIES OR TERREMARE.—M. Geffroy has recently called the attention of the *Acad. des Inscr.* (Jan. 2) to the importance of Prof. Pigorini's researches among the *terremare* or prehistoric cities of Emilia, details of which have been given from time to time in the news of the JOURNAL. In his opinion the exploration of that of Castellazzo di Fontanellato has shown that these ancient Italic cities were built on the same plan as those of the Etruscans: in both are found the quadrilateral shape, the *agger* and the ditch, the *decumanus* and the *cardo*. These facts, says M. Geffroy, should be brought into relation with the ancient legends "on the foundation of Rome, on *Roma quadrata*, with its augural orientation,

its *agger*, sacred ditch and wood bridge devoid of any iron—on so many remembrances of the bronze age preserved in primitive Rome.”

ALTAMURA (near).—**AN ANCIENT NECROPOLIS AT CASALE**.—At a place called Casale, seven kilom. from Altamura an ancient necropolis has been discovered. Fifty tombs have been opened, equidistant and of similar shape and size. Their contents are of small importance. Near by are also traces of isolated tombs at three points.

Cav. Jatta while considering the discovery of but slight archæological interest points out its historical and archæological importance. It is by such discoveries that we discover the sites of the towns that arose in ancient times around the great cities and were dependent upon them, demonstrating over what a broad and populous territory these cities held sway. The vases found in the tombs belong to the close of the third century B. C. and appear to be all of Apulian manufacture, similar to the Ruvo vases.—*Not. d. Scavi*, 1890, pp. 357–61.

AMELIA.—**A PREHISTORIC TOMB**.—In the territory of Amelia under an accumulation of stones was found a stone box formed of six slabs of stone ($67 \times 41 \times 40$ cent.) carefully joined. Within it were five ossuaries, four accessory vases, five unguent vases and a lance cusp. All the vases are in good preservation. Inside one ossuary were two fibulas, a belt-clasp, a ring, and two bronze slabs. Four of the ossuaries are with heavy body, without handles or foot, with a short neck and projecting mouth: they are of red paste, hand made, badly cooked and without decoration. The covers are turned, of finer clay, with brown varnish, well-worked with foot and handles, of campaniform shape. Of the smaller vases one is remarkable for a palmette decoration around two concentric circles, itself inclosed within a band of five oblique lines. The ornaments are few in number. A silver fibula is of the Cenisola. Tombs of a still more ancient type have been found in this region, contain grains of amber and gold objects. The present tomb has been purchased by the Minister of Public Instruction for the museum at Genoa.—*Not. d. Scavi*, 1890, pp. 368–70.

APICE (Apulia).—**MEDIÆVAL AND ANCIENT REMAINS**.—Sig. F. Colonna reports in *Not. d. Scavi* (1890, p. 393–5) on various discoveries and investigations of minor importance in the territory of Apice. Such are some bronze statuettes of Hercules, some tombs of the time of Constantine, ruins of buildings, a Christian inscription of considerable length, Consular and other coins. There are the ruins of several monasteries: such are; that of S. Lorenzo al Bosco, erected in 792; that of the Franciscans; that of S. Antonio, including a cloister.

ARICIA.—**DISCOVERY OF ITS WALL**.—Prof. Lanciani has discovered the fortified wall of Aricia, near Rome, constructed by Sylla, after the new military colonization. The walls extend over a length of 700 metres and

have a mean height of 3.50 met. The general plan is that of a parallelogram whose long sides are parallel to the Via Appia. There remain the long western side and one half of the north and south sides, with one of the gates.—*Chron. des Arts*, 1891, No. 10.

BENEVENTUM.—The city of Beneventum, whose important monuments are so unfamiliar is to be illustrated finally by a competent hand in the following fully illustrated work which appears in monthly instalments: *I monumenti e le opere d'arte della città di Benevento, lavoro storico, artistico, critico, dell'ingegnere architetto* ALMERICO MEOMARTINI. in-8o, pubbl. mensile. Benevento, de Martini, 1889-91.

BOLOGNA.—**THE LIMIT OF THE ITALIC NECROPOLIS.**—Sig. Brizio reports in the *Scavi* (1890, pp. 371-3) the finding of four tombs in the Nanni property outside the Porta Isaia, opposite the Arnoaldi property, 13 S. met. s. and 3 w. of the Guglielmi house. In an area of a hundred metres only these four tombs came to light, two for inhumation and two for cremation. Beyond the last of these a trench tomb had been begun and never finished, probably through the disuse of the necropolis. To the north there were no traces of tombs. Consequently here appears to be the western boundary of the Italic necropolis. As yet the trench which marks its consecrated limits has not been found. The fact is the confirmation of excavations made in 1888.

BOSTEL (Venetia).—**A VILLAGE OF THE VENETI.**—At this place have been uncovered remnants of huts and their contents which evidently belonged to a rude and barbarous tribe of the Veneti, both agricultural and warlike in character. The village had been destroyed by fire, probably by the Romans.—*Not. d. Scavi*, 1890, pp. 293-4.

CASTELLUCCIO.—Comm. Gamurrini reports as follows on some excavations near Chiusi: "In the territory of Chiusi, west of the hills separating the valley of Orcia from that of Chiana is a place called *le Foci* as *Fauces* used to be the name for the easiest pass. Here was anciently a passage for Italics and Etruscans, who fortified it from the beginning and who inhabited the heights above, now called *Casa del Vento*. They then surrounded it with solid walls of great square blocks, a piece of which has been discovered to the west. Cav. L. Micali, the owner of the place and of the medieval fort called Castelluccio . . . has made many excavations and after having opened and examined the large necropoli, the city walls and various antiquities, believes this to be the *Camars vetus* or the *Chusini veteres* noted by Pliny. It is at all events certain that in these *foci* the Italics first established themselves and were then succeeded by the Etruscan culture. Three years ago Sig. Micali gave to the University of Siena the vases, bronzes and Etruscan inscriptions that had up to that time been found. Since then many other objects have been discovered in the necropolis and pre-

served on the spot. There are numerous vases of black *bucchero*, some of them impressed in the Phœnician or Carthaginian style and with the reliefs of lions, panthers, *etc.*, with which the archaic Etruscan vases are decorated. There is no lack of Greek vases from the severe black-figured style to the red-figured vases from Attica. The antiquities show the place to have flourished from the remotest times down to the third century B. C. when it languished and finally became extinct before the Imperial period.

Two years ago a tomb was found closed by a large block of sand-stone with Etruscan inscriptions on the front and another along the thickness; the latter being the main inscription of the tomb. The short inscriptions on the front contain various names which appear to denote those who were successively buried here. Unfortunately it was not dug out entire and two inscribed fragments were left behind. But even as they stand the inscriptions from the archaism are of great value. The main epitaph is incised in the form of a snake: it shows the tomb to be that of Larthia Largenia whose mother appears to have been Tana Situnia. The other lines it is impossible to decipher.—*Not. d. Scavi*, 1890, pp. 300-12.

CHIUSI.—ETRUSCAN ANTIQUITIES.—The vicinity of the lake of Chiusi was dotted in Etruscan times with a number of villages. Of these no traces remain except small groups of tombs which are sometimes met with, especially on the summits of the hills in front of the lake. These tombs are excavated in the slope without regular orientation. A number were discovered during the past year at a spot called *il Ranocchiaio* under the villa of Cav. A. Mazzuoli: from them came jars, vases and four travertine urns with Etruscan inscriptions on their cover.—*Not. d. Scavi*, 1890, pp. 307-8.

CITTADUCALE.—ROMAN REMAINS.—At Cittaducale, where stood the ancient Aquæ Cutiliæ, some *thermæ* have been discovered and fragments of inscriptions.—*Athenæum*, March 21.

CIVITÀ-CASTELLANA=FALERII.—A number of new tombs have been opened which date from the third century B. C. and contain terracottas bearing numerous Faliscan inscriptions.—*Rev. Arch.* 1891, 1, p. 241.

CONCORDIA=SAGITTARIA.—MILITARY NECROPOLIS.—Com. Persico has continued work in the part of the military necropolis nearest the city, and, though no works of art came to light, there were found a number of funerary inscriptions of some interest, especially in regard to the penalties for violation. The Batavian Glabruna stipulates for a fine of three ounces of gold to be paid to the fisc. Flavius Ziperga [his full name was probably H. Zip. Pudens, contrary to the *Scavi*, Ed.], of the Prima Martia, Victrix, wishes his violator's head unless a payment of eight pounds of gold be made. Flavius Martidius insists on unredeemable capital punishment. The rest are satisfied with pecuniary compensation.—*Not. d. Scavi*, 1890, pp. 339-344.

FOLIGNO (near).—A ROMAN TEMPLE.—Canon Faloci Pulignani reports that in 1888 that on the hill called *Monte Tabor*, near Foligno, he found important remains of an ancient temple with fragments of architraves, columns, sculptures (though the sculptures are a Christian work of about the fourth century) which demonstrate that the temple was of considerable size.—*Not. d. Scavi*, 1890, p. 316.

FORLI.—A STATUETTE OF HERCULES=BES.—A small bronze statuette found in digging for a water-conduit in Forli is interesting as representing an amalgamation of Egyptian and Latin deities. It represents a man of low and heavy stature, muscular and with large head, thick beard, turn-up nose, long ears, and rudimentary horns. The skin of a lion (?) covers his neck and back. In his right he appears to hold a purse and in his left squeezes by the head a serpent which twists about his arm. On his head he bears an open lotus. The statuette seems to represent the Egyptian god Bes with some Latin characteristics.—*Not. d. Scavi*, 1890, p. 344.

GREAT ST. BERNARD.—PLAN DE JUPITER.—E. Ferrero, who was charged by the Italian government with the excavations on the Plan de Jupiter, at the Hospice of the Great St. Bernard, has issued in the *Notizie degli Scavi* (1890, pp. 294–306), a report on the first part of his excavations during which he cleared the site of the temple of Jupiter Penninus and the entire east side of the plateau. To this he prefixes a summary of previous excavations undertaken, in 1760–64 by Canon Murith, in 1837 by Countess di Sala, in 1838 by Carlo Promis, in 1871–4 by Canon Marquis and, since 1883, by Canon Lugon. In none of these partial excavations was any systematic attempt made to throw light on the topography of the plateau. The excavations of 1890 under Sig. Ferrero have completely uncovered the plan of the temple consecrated by the Romans to the local divinity to which they gave the name of Jupiter. It seems probable that its construction dates from the time of the building of the roads across the pass, concluded only when the conquest of Rhaetia in 15 B. C., made ten years after that of the valley of Dora Baltea, and the beginning of the Germanic wars, had made it necessary to establish regular communications between the new city of Augusta Pretoria and the valley of the upper Rhone, between Italy and the camps on the Rhine. The temple, already in ruins, must have been completely destroyed, when, at the close of the tenth century, St. Bernard made use of its material for the construction of his Hospice at the opposite end of the plateau. But the Carlovinian coins found here confirm the idea that even in the ninth century there remained here a place of refuge for travellers.

The rock on which the temple was founded was of uneven surface and the builders instead of equalizing it, satisfied themselves with cutting for the foundations stepped recesses. The structure consisted of a pronaos

and a cella, the former 2.45 by 5.80 met. the latter with a length of over six metres. The outside measurement of the structure are 7.40 by 11.20 metres. The temple was *in antis* but it is uncertain whether there were columns in front. The walls, 80 cent. thick, were entirely of stone. Within and around it were found many objects, especially some good bronze. Of the coins found some (17) were Gallic, some (30) Roman of the Republican and Imperial periods, and one Carlovingian.

LOKROI.—THE APHRODITE OF MELOS.—M. Ravaisson called the attention of the *Acad. des Inscr.* on Jan 23 to a confirmation of his theory regarding the restoration of the Venus of Melos which he considers to have formed part of a group with Ares. Sig. Orsi in his excavations at Locri (Gerace) discovered a terracotta relief which he attributes to the time of Pheidias, on which is a female figure resembling the Aphrodite of Melos, grouped with the figure of a warrior recalling the Borghese Mars or Ares, towards whom she turns and leans upon his shoulders.

LUNI=SARZANA.—ROMAN ANTIQUITIES.—In the *Not. d. Scavi* for 1886 (pp. 5, 35) it was reported that Marquis Q. Gropallo had discovered on his lands, included within the limits of the ancient city of Luni, a number of Latin inscriptions. Among these was the fragment of a Christian inscription ascribed to the ancient church of St. Mark near which there evidently had existed some important public edifice of the ancient city, all the more that at the beginning of last century several Latin *tituli* were found, one being in honor of Augustus, the patron of the colony.

The recent excavations were undertaken within the ruins of the church and, by the removal of a mass of *débris* belonging to ancient buildings, there was laid bare the plan of the church as well as an elevation of over two metres about the apse. The plan is oblong, measuring 30.50 met. long up to the confession by 19 met. wide. The confession is 1.13 met. above the level of the church, and is formed of an apse 7.80 met. in diameter: around it is an ambulacrum which is reached by descending two flights of three steps and is 80 cent. wide and 12 met. long. This ambulacrum is paved with a mosaic in *opus sectile* of good workmanship. In a space arranged between the outer wall and the ambulacrum is a rectangular sepulchral *cassa* (1.80 × 0.80 × 1.10 met.) covered with large slabs of brown stone. On opening it, was found a body in perfect preservation, which crumbled to dust. [This was undoubtedly the body of the martyr to whom the church was consecrated. The arrangement of a deambulatory around the apse is rare and early, having been found in a few basilicas of the iv and v cent.—ED.] Along the axis of the deambulatory and apse, is cut a passage formed of two parallel walls, probably originally covered with a vault or slabs and forming a crypt-passage under the altar. The apse has seven square-headed windows on whose cornices rest

as many engaged colonnettes. This decoration in brick is adossed to the wall of the original structure, constructed below of large blocks of tufa and above of bricks.

This latter work is of a good period. A semicircular side apse is a posterior addition of rude stone-work. At about four metres from the main entrance rises the square tower which is now reduced to a height of 2.50 met.

The rectangular pagan structure on which the church is based is paved in the centre with slabs of white marble and on the sides with a rough mosaic of white and black slabs forming stars and crosses, like other mosaics from the excavations of Luni mentioned by Promis. A small well was found in front of the side apse.

A trench dug along the axis of the apse through the church uncovered a series of ten piers arranged in two parallel rows: they were used as bases, and eight of them are inscribed—one on all four sides, one on three, and the rest on one side only. An eleventh was found overthrown and out of place: it was hexagonal instead of being rectangular. None of the statues which stood upon these piers have been found in the interior, and only fragments outside.

The longest of the inscriptions reads

EX DECRETO ORDO LVNENS
ET CIVES INMORTALIBVS
BENEFICIIS RELEVATI OB MEMO
RIAM POSTERITATI TRADENDAM
STATVAM COLLOCARVNT LVCILIO
CONSTANTIO PRAESIDI MAVRETANIAE
ET TINGITANIAE V. C. CONSVLARI
TV SCIA E ET VM BRIA E

A bronze statue was erected to L. Titinius: other statues were dedicated to the emperors Carinus, Diocletian, Galerius, Maxentius, to Claudius Sabinus and other distinguished men.

The following are some of the marble sculptures unearthed. Four torsi of statues in long togas; two male busts; several heads; two small statues of matrons, of excellent workmanship; a small female statue without head or extremities; a relief with two figures; a large number of architectural fragments, among which the most remarkable are a capital and two pieces of cornice decorated with foliage and flowers in the best classic style. There are some capitals and spiral columns of mediæval workmanship, partly belonging to the entrance of the church, as did also a colossal lion devouring an animal. Beside these marbles, many objects in terracotta, glass, bone, bronze, iron and stone were found, as well as coins.

The ancient building was apparently built of large blocks of tufa and of a construction that carries one back to the time of Augustus. Judging from the inscriptions dedicated in it by the *ordo populusque lunensium* to emperors and important personages, this must have been the main public building of Luni.—*Not. d. Scavi*, 1890, pp. 374–85.

MARZABOTTO.—To the north of the *Piano di Misano*, at the spot marked Q on the plan (*Mon. Ant. Linc.* II) a conduit has been found which received and carried off the drainage of the houses on the north side of the Etruscan city. It was preserved along a length of 23.50 met., with an internal measurement of 29 × 63 cent. and was constructed of large blocks of hard travertine, on all four sides. It led toward the river.—*Not. d. Scavi*, 1890, pp. 373–4.

METAPONTUM.—**RESTORATION OF ITS TEMPLES.**—M. Charles Normand, editor of the *Ami des Monuments*, has published in that review (No. 24, 1891, pp. 87–93) a paper illustrating the twelve drawings exhibited at the *Salon* of 1891 in which he attempts to reconstruct the architectural structures of the ancient Metapontum. In the first plate is the plan of the city with its wall, agora, theatre, temples, streets, suburbs, port and necropolis. A good plan of the *Tavola dei Paladini* is given (No. 16) giving the place of the E. colonnade and of the cella wall, thus for the first time giving an accurate idea of the structure of this temple, which he, following Lenormant, attributes to Demeter. M. Normand indulges in an elaborate sculptural and pictorial decoration of his reconstructed temple, taken from ancient models, the subjects being taken from the myths of Demeter and Persephone. He gives thirteen columns on the sides and six in front, thus a hexastyle peripteros.

MILAN.—**REPORT ON THE ADDITIONS TO THE ARCHÆOLOGICAL MUSEUM.**—The *Archivio Storico Lombardo* (June 30, 1891, XVIII, 2, pp. 415–453) publishes the usual interesting annual report of the objects added to the archæological museum in Milan; this being for the year 1890.

I. GIFTS AND PURCHASES.—*Prehistoric.*—The widow of Sig. Delfinoni gave the collection of prehistoric objects formed by him. They all come from the prehistoric stations south of Lake Maggiore where, on the two banks of the Ticino, along a distance of some 40 square kilometres are scattered necropoli in groups, some on hills some in vales, all known by the general name of *Golasceca* from the site of the most important discoveries. The museum already possessed the noted Giani collection from the same region, the tomb of Sesto Calende, the antiquities of Vergiate, etc. The Delfinoni collection comprises over 300 pieces. Prof. Castelfranco has catalogued them in two groups of which over half are terracottas and the rest bronzes. The earliest group goes back to the close of the bronze age or the beginning of the first iron age and comes down to pieces that feel

the influences of the Illyrian invasions and even perhaps the Celtic influence of the La Tène type. This period is characterized by urns with scratched triangles and other peculiarities of technique. The later group is characterized by smooth surfaced urns red or black varnished with a decoration not scratched but raised and sometimes without any decoration. The most important pieces are, in the first group: (1) the earliest urn with six bands of scales and parallel lines instead of triangles; (2) a second urn which has beside the usual triangles, filled in with white enamel, a lower band of horses drawn with geometrical lines and comparable to the later but similar design on the prehistoric vases of Rondineto near Brescia; (3) a cup with high foot, decorated with three geometrical animals; (4) three open bronze bracelets like the Coarezza type of the close of the bronze age. Among the pieces of the second group are several vases, a bronze situla, a pin-head with six ducks, *etc.*

Cav. Ancona gave a number of prehistoric objects found at Bosisio, Alzate, Caramanico, near Lodi, *etc.* The most important are: (1) a fine bronze hatchet of the Lodi type; (2) a bronze lance head found at Golassecca, 18 cent. long, similar to those of the *Cascina Ranza*.

Cav. Zerbi gave a series of prehistoric objects found at Vergiate, which while comprised within the Golassecca zone are of quite a different character and not quite as ancient. Comm. Vela gave some objects found in the territory of S. Pietro di Stabio where the famous stone with the inscription *Komoneos Varsileos* was unearthed.

Gallic antiquities.—In 1890 Prof. E. Decker and Cav. P. Clerici excavated at Gerenzano near Saronno and gave the results to the museum. They include vases of terracotta and stone (gneiss), fibulae, objects of bronze and iron. They are partly Gallic and partly Roman. It is thought that systematic excavations would yield important results, especially if continued to a certain depth below the later strata.

Roman antiquities.—Count Trivulzio donated some Roman antiquities found at Briosco. Comm. Vela gave a leg of a statue and a marble vase found at S. Pietro di Stabio.

Lombard antiquities.—Dr. G. Carotti gives a dissertation on some sculptures of the VIII century of early Lombard style, from the monastery of Cairate on the Olona. On account of its importance it is summarized separately under the head *Cairate* (q. v.).

Middle Ages and Renaissance.—Cav. Zerbi gave an interesting capital of the XIII cent. decorated with beardless heads and with the arms of the ancient Alemanni family.

A bust of white marble, representing an *Ecce Homo* was purchased. It belongs to the close of the xv cent., is in good preservation and 52 cent. high. The head of Christ is full of character: it is slightly bent over the

right shoulder; the mouth is opened as if words were being spoken through heavy lips; the sunken cheeks express lassitude; the melancholy drooping eyes, a thoughtful resignation; the hair is soft and delicate falling in broad simple style in undulations on the shoulders. The simple and pure lines of the head give an ascetic and philosophic impression. The chest is broad and the shoulders heavy: in their clumsy lines there seems to be an antithesis to the head. The work is characteristically Lombard broad and not graceful. The contrast between the inner sentiment of the artist, deep and thoughtful and the execution still partly enslaved to a rude realism bring to mind the works of **CRISTOFORO SOLARI**, especially during the period anterior to his journey to Rome (1495-99).

Among other purchases was that of a rectangular begging box of wood from Piacenza decorated with reliefs in the late Gothic style (xv cent.) on a gold ground and with colored figures. Such boxes are almost unique.

Cav. Zerbi gave the fragments of the base of a column from a double window in the castle of Abbiategrasso belonging to the Visconti. The Gothic decoration encloses the initials I and M and the words *dux mediolan.* They therefore belong to Giovanni Maria Visconti, duke of Milan from 1402 to 1412.

II. GIFTS AND LOANS FROM EXCAVATIONS IN MILAN.—In the Via S. Vincenzino a Roman statuette of late art and a capital were found. The capital is exceedingly interesting. It belongs partly to the Corinthian style passing from the round to the square or cubic. Its imitation of a classic capital is almost perfect but it has elements of Syrian and Byzantine style in the style of cutting and the kind of foliage. It shows, in fact, the passage from Roman to Byzantine decoration in Milan. It is comparable to a capital found at Rome in the forum of Trajan and now in the Lateran which is Ionic in its upper part and below has laurel leaves in the Syrian style, sawed out and with hard modelling. From a similarity with the capitals of the crypt of the church of S. Stefano in Lenno, on lake Como (*Riv. Arch. di Como*, x, pl. 2) the date of the Milanese capital would be the fifth or early sixth century, and certainly anterior to the disasters of 539.

A capital and column of the XIII cent. belonging to the old church of Brera have been found. A capital of the early xv cent. with the arms of the Arconati, and a fragment of terracotta frieze of the same century with delicate Gothic arcaded decoration from Via Broletto; and an early cast of a Virgin and Child from Via Cordusio, we also added to the collection.

A BILINGUAL ETRUSCAN AND LATIN INSCRIPTION.—Prof. Elia Lattes recently called the attention of the R. Istituto Lombardo to the inscription scratched on an amphora found in *Via dei Ratti*. The first line has in Etruscan characters the word *trimetr*, the Etruscan reduction of the Greek *τρίμετρον* in the sense of *trimodia* or *amphora*: the second line has the

latin cifres for 76½ indicating the contents in pounds. The milanese amphora would thus appear to be short, holding 3½ pounds less than the 80 Italic pounds, the measure of the regular Roman amphora. The two together form probably the earliest Etruscan bilingual inscription worthy of being placed side by side with the other precious palaeo-Italic piece in Milan, the Messapian helmet of the Poldi Pezzoli collection.—*Arch. St. Lomb.* 1891, p. 452.

ORVIETO (near).—In the territory of **BARDANO** in digging a grotto, about eight kil. from Orvieto an Etruscan tomb was opened. It was cut in the tufa, with an entrance on the east. It had been despoiled and there were found a bronze armlet, three pottery paterae and many fragments of vases, rough terracottas and painted vases.—*Not. d. Scavi*, 1890, pp. 385–6.

Near **CASTELGIORGIO** Sig. Gaddi of Orvieto started excavations in his property of Fattoraccio and found two chamber tombs along a branch of the *Via Cassia* in a sandy knoll. They belong doubtless to an Etruscan necropolis dispersed in groups over the entire plateau around the east side of Castelgiorgio which is probably situated on the site of an ancient *pagus*. The existence of such a necropolis was ascertained as early as 1865 and the tombs then found had a rich contents of gold objects, of terracotta vases in imitation of metal vases, engraved mirrors, and bronze vases with Etruscan inscriptions,—all of which proved the age of these tombs to be between the third and second centuries B. C. Other important discoveries succeeded in 1877 when Sig. Mancini of Orvieto explored the entire right side of the branch of the Cassia, opposite the Gaddi tombs. It thus appears now that this road was entirely lined with ancient tombs, thus showing it to have been originally a main road, probably the Etruscan highway over the Fattoraccio plateau, leading from Orvieto to *Grotte di Castro*.

The two tombs found by Sig. Gaddi had fallen in: they had been violated at some time when the vaults were still intact. The first tomb was composed of a single chamber with two funerary benches on which the bodies rested and between which, near the dear were heaped about thirty small vases of rude manufacture except two *oinochoai* in Campanian style. There were also two mirrors and a gold bracelet-sheet.

In the second tomb there were no terracotta vases but many fragments of bronze vases, mirrors of good style, part of an inscribed bronze *oinochoë*, and decorative covers and handles of vases with masks, heads, dolphins, etc. A few decorative pieces escaped the devastators—a pair of gold pendants, a pair of spiral gold earrings, a gold bracelet, two fibulae, etc.—*Not. d. Scavi*, 1890, pp. 351–3.

PETRIGNANO.—**ETRUSCAN ANTIQUITIES**.—Opposite Petrignano near the lake of Chiusi is a place called *Malestante*, the property of Sig. A. Romizi. There, on the s. side the Etruscans excavated a necropolis with a double

row of chamber tombs. Excavators have been usually discouraged because nearly all the tombs were found to have been previously pillaged. The village to which this necropolis belonged appears, from the age of the few remains on this hill, to have flourished in the fifth and sixth centuries B. C. The principal monument found lately by Sig. Romizi has been one side of a square tufa cippus left there after the Etruscans had sawed away the greater part of the monument. This peculiar custom was apparently for the purpose of dividing the work among tombs of the same family, without regard to the preservation of the carved figures. In this case two of the figures have been cut lengthwise. The work is in very low relief, in the archaic Etruscan style and consists of three figures: on the r. a man, on the l. a woman and in the centre a child. The man salutes the woman with his right hand: his head is covered with a broad-brimmed hat, and he wears a fringed shirt reaching below his knees; and over it a mantle. The woman has earrings and a frontlet and wears a pleated robe and a mantle: she salutes the man with her left hand. The child salutes her and walks with the man while she proceeds in the opposite direction. It represents the supreme farewell of the wife and mother to whom the monument was erected. The remaining section on the right shows a flute player and that on the left a mourner. The style though archaic is extremely correct, and the outlines sharp and firm: the eyes project and the lips are thick but the action is good.

A number of vases and of terminal cippi were also found on the same spot. Opposite it at *Petrignano* is an Etruscan site with a few Etruscan tombs of the third and fourth centuries B. C. It is singular to find here some slabs of the volcanic tufa of the *Monti Cimini* which the Southern Etruscans as they went northward seem to have been in the habit of carrying with them.—*Not. d. Scavi*, 1890, pp. 308–10.

POMPEII.—The following is an abstract of the recent Journal of excavations compiled by the Superintendents.

September 1890. Excavations were continued in isola 2 reg. VIII on the south side of houses 20, 19, 18, 17, 16 and 14, which communicate with each other internally. Besides this the excavations of the agger outside the Porta Stabiana has been continued. The discoveries outside the Porta Stabiana were of considerable importance: only the inscriptions are reported. On the left are two semicircular tufa chairs, like those of Mamia and Veius, each in an area surrounded by walls. Flanking the first were two cippi of lava each with the inscription M · TVLLIO | M · F | EX · DD. The analogy of the cippus of M. Portuis (*C.I.L.* x., n. 997) placed similarly by his tomb outside the Herculanean gate show that these cippi were placed to indicate the limits of the sepulchral area given to M. Tullius by decree of the decurions. This man is certainly the M. Tullius, son of Marcus,

three times a justiciary duumvir, quinquennial, augur and military tribune by popular vote who in the time of Augustus built at Pompeii *solo et pecunia* sua the *aedes Fortunae Augustae*. This is further demonstrated by the identity of material and lettering with those of the cippus placed by the above temple on which is inscribed: *M. Tulli M. f. area privata*. The benefits which M. Tullius conferred on the colony sufficiently explain the decurions concession. During the half century before the destruction of the city his sepulchral area was invaded and the terminal cippi cast down.

The second tufa chair has on its back the following inscription in fine letters: M · ALLEIA Q · F · MEN · MINIO · II · V · I · D · LOCVS · SEPVLTVRAE · PVBLICE · DATVS EX · D · D. Although the existence of the *Alleii* in Pompeii was known, the name of the duumvir M. Alleius Minius was hitherto unknown. No trace of his tomb remains.

The most important inscription found south of the forum (Is. 2, reg. VIII), both for date and interest is one which belongs to the series of the *inscripciones ministrorum Mercurii, Maiae, postea Augusti*. It reads as follows:

A · A · P · R · D · D
 GRATVS · CAESAR
 L · MINIST · IVSSV
 Q · COTRI · D · V · I · D
 C · ANNI · MARVLI
 D · ALFIDI · HYPSEI
 D · V · V · A · S · P · P
 M · SERVILIO · L · AELIO
 COS

The date is 3 A. D. Of the usual two duumvirs only one is mentioned, Q. Cotrius Q. f. while his colleague's name, M. Numistrius Fronto, is omitted, the latter having died in that very year. The most important peculiarity of this inscription is the series of initial letters on the first line. The last two stand for D(ecreto) D(ecurionum), and perhaps one A may be connected with Augustus. For the other letters no interpretation is even suggested.

An inscription found in the same vicinity is read: [A]lleia [M]ai. f. | [S]acerd. V[eneri]s | et Cerer[is. si]bi | ex. dec. decur. pe[g. pub. Up to the present only priestesses of Ceres were known. This inscription appears to show that in Pompeii as in *Surrentum*, *Casinum* and *Sulmo* the priesthood of Venus was joined to that of Ceres. The priestess Alleia appears to be the daughter of the well-known Cn. Alleius Nigidius Maius who was called *princeps coloniae*.—Not. d. Scavi, 1890, pp. 327–334.

Excavations have been conducted at the furthest extremity of the Via Nolana, and at the extreme angle of the triangular forum of a small

subterranean construction which stands before the temple of Hercules, hitherto supposed to have been a bidental. It is now proved to have been a simple well of spring-water, for the stone casing ceases at a certain depth, and underneath only earth is found. Amongst the latest objects discovered is a small bronze head of a woman, with a silver band around the hair and a crown of ivy.—*Athenæum*, July 19.

REGGIO (province of; in Calabria).—**AN ARCHAIC ACHAEAN INSCRIPTION.**—A fragmentary bronze plaque was recently given to the National Museum in Naples upon which is a Greek inscription in archaic characters. The entire left side is wanting. The place of discovery is unknown, though it was purchased in the province of Reggio. But the alphabet is that of the Achaean colonies, thus excluding Rhegion, which was essentially Chalkidian. The *grafía*, the characteristic dividing dot and the mention of the $\pi\rho[\acute{o}\xi\epsilon\nu\omicron\iota$, evidently as magistrates, arbiters or witnesses all call to mind the well-known bronze of Petilia (Rochl. I. G. A., n. 544) and indicate a common source. The number of Achaean inscriptions is too small for much comparison, especially as the present, so far as preserved consists mainly of proper names such as $\Sigma\mu\acute{\iota}\chi\omega$, $\Phi\acute{\iota}\lambda\iota\pi\pi\omicron\varsigma$ and $\Delta\omicron\rho\kappa\epsilon\upsilon\varsigma$. A comparison with the Petilian tablet shows that we have here an enactment which the *proxenoi* sign and to which they give the $\kappa\acute{\upsilon}\rho\omicron\varsigma$. Noteworthy, though not novel in the epigraphy of Southern Italy and Sicily, is the use of initials or abbreviations, such as $\Delta\nu$, $\Xi\alpha\nu$, etc. two of which follow proper names and appear to be abbreviations of their demotikon, while the third may stand for the name of a tribe. The period is that of the bronze of Petilia which is considered by all to be not later than the sixth century B. C.—*Not. d. Scavi*, 1890, pp. 361–3.

ROMA.—**AN ANCIENT PIER OR LANDING.**—On p. 585 of vol. V the discovery was announced of a tufa platform with remains of a circular peristyle with a diameter of 19 metres, open on the south, in the form of a horseshoe. But its destination was then unbroken. The following is the result of further excavations reported in the Jan. number of the *Bull. Comm. arch.* The portico enclosed a circular tempietto 4.20 met. in diameter in front of which was a marble altar carefully executed—evidently sacred to Bacchus. Far earlier than this temple and portico is the immense pier below it constructed of large blocks: the former belonging to the second half of the third century, the former at least as early as Augustus. The pier is therefore of great interest. At a distance of 160 metres from the Ponte S. Angelo it projects into the river 26.50 metres: its present total length is about 50 metres, its width 13.70 met., its depth between 3.60 and 56 metres. It is built mostly of volcanic tufa mixed with some harder tufa and travertine. Two platforms on the north side are formed by the help of dykes and piles. Basing himself on Padre Bruzza's documents Sig.

Marchetti concludes that this is the *Statio marmorum*, the pier where imported marbles were disembarked. Its size and strength is well proportioned to such a purpose. It was probably established, in connection with the first port, at the close of the Republic and became, later, the *Statio Patrimonii* mentioned in inscriptions.

All around such a pier it would be natural to find traces of establishments for the working of marbles, for their preparation for use in temples and public edifices of all sorts. In fact, in many of the excavations carried on in this neighborhood there have come to light numerous traces of workshops of marble cutters and workers with columns and blocks of marble still rough or only partly blocked out.

Sig. Lanciani writes in regard to it: "Above the bridge of S. Angelo, has been discovered a pier or landing built of blocks of tufa, put cross-ways without any help of cement, and coated with an outside facing of travertine. This construction looks like a raised causeway or embankment, protruding into the river for a distance of 26 m. at an angle of forty degrees to the main line or direction of the stream. On each side of the causeway there are two spacious landings almost level with the water's edge, built of concrete, and faced with a palisade. This palisade, a perfect specimen of Roman hydraulic engineering, is composed of square beams of *Quercus robur*, from 6 to 8 m. long, ending in a point protected by a four-pronged cap of iron. The size of the beams is 55 centim. by 50, and they are made to fit into each other by means of a groove on one side and a projection on the other, both shaped *a coda di rondine*, or swallow's tail. Sheets of lead, 4 millim. thick, are nailed against the inner face of the palisade so as to make it thoroughly water-tight. A line of piles runs in front of the palisade, to protect it from the action of vessels moored alongside the landing. The origin, the nature, and the destination of this interesting construction have been very cleverly described by the inspector of the works of the Tiber, Signor Marchetti, in a recent contribution to the *Bullettino Archeologico*. It was the landing-place, or wharf, for the marbles of every size and description to be used in the buildings of the Campus Martius, and of the Pincian and Quirinal hills.

"Suetonius, speaking of the transformation of Rome under Augustus, says that many wealthy patricians and personal friends of the emperor, Cornelius Balbus, Marcius Philippus, Statilius Taurus, Vipsanius Agrippa, moved by his enterprise, covered the Campus Martius with colossal constructions. In the space of twenty-two years—from 721 A. U., which is the date of Agrippa's ædileship, to 743, which is the date of the erection of the horologium, or sundial, one of the last works of Augustus—these five men raised nine porticoes, three theatres, one amphitheatre, fifteen temples, five public parks, thermæ, aqueducts, fountains, artificial rivers

and lakes, altars, *mausolea*, *fora*, a complete system of drainage, and a bridge across the Tiber.

“The old marble wharf, at the southern end of the city, near the modern *Marmorata*, could not have been used for the purpose of landing the materials destined for these constructions of the Campus Martius, because the transportation of columns, pillars, and obelisks through the narrow and tortuous streets of the IX, XI, and XIII regions would have been impossible in some cases, difficult in others, and always costly to excess. And besides, there was no reason why preference should be given to transportation by land, when the vessels loaded with transmarine marbles could easily be brought within a few yards of the buildings in construction. The blocks were evidently discharged on the side landings, level with the water's edge, which have a water frontage of 100 met. and then raised by means of cranes (such as the one represented in the bas-relief of the Aterii, published, among others, by Parker in part IV. of the *Archæology of Rome*, plate XXIII.) to the level of the causeway, and pushed on rollers (*chamulei*) towards their destination.

“The discovery of this new topographic feature of ancient Rome fits remarkably well with others previously made in connection with the sale, trade, and working of marbles in this portion of the Campus Martius. When the church of St. Apollinaris was modernized and disfigured in 1737–40 by Popes Clement XII. and Benedict XIV, ruins and inscriptions were discovered proving that there stood in old times the *Statio Rationis Marmorum*, that is to say, the central office for the administration of marble quarries, which were the private property and monopoly of the Crown. Around this office, and on each side of the avenue connecting it with the pier just discovered by the Tor di Nona, stone-cutters and sculptors had settled in large numbers. Wherever the ground is excavated between S. Andrea della Valle and the left bank of the river we are sure to find traces of these workshops and artists' studios, the site of which is marked by a layer either of marble chips or of that yellowish crystalline sand which is used to the present day for sawing the blocks. Pietro Sante Bartoli, Flaminio Vacca, Ficoroni, and Braun describe many such shops found under the Monte Giordano, S. Maria dell' Anima, the Collegio Clementino, the Chiesa Nuova, etc. It is difficult to explain why many of these should have been abandoned so suddenly that works of sculpture in an unfinished state have been found, together with the tools of the trade—hammers, chisels, and files. More difficult still to explain seems the fact that, in the majority of cases, the unfinished statues represent Dacian kings or Dacian prisoners, in the same characteristic attitude of sad resignation which we notice in the prototypes removed from the triumphal arch of Trajan to that of Constantine. One of these figures of Dacians, discovered in the reign of Clement X in the Via del Governo Vecchio, was placed on

the staircase of the Altieri Palace; a second was found in July, 1841, under the house No. 211, Via de' Coronari; a third in January, 1859, under the house of Luigi Vannutelli, near the Via del Pellegrino; a fourth in 1870, under the house of Paolo Massoli, in the same Via de' Coronari. These singular facts lead us to believe that the sudden abandonment of the ateliers of the Campus Martius must have taken place soon after the death of Trajan, the conqueror of Dacia, or else that the production of the article *à la mode* under his rule must have been in excess of the demand.

"Semicircular Portico.—A second discovery has taken place under the Teatro Tor di Nona, that of a semicircular portico in the shape of a Greek Ω. It is built of white marble, with one single row of columns. In the centre of the hemicycle stands a diminutive round temple, 4.20 met. in diameter, and before it an altar ornamented with the customary sacrificial emblems. For singularity of shape, plan, and architecture the shrine stands unique among this class of monuments. The capitals of the columns are modelled in the shape of a leopard's skin folded and twisted round the top of the shaft. This motive of decoration, and the name LIB(er?) engraved on a fragment of the architrave, make us believe that Bacchus was the titular god of the place, a god always welcomed and cherished by sailors.

"Inscriptions of Lucretius Zethus.—Higher up the river, near the church of S. Lucia della Tinta, that is to say, near the site of another pier (and ferry connecting the left bank with the Domitian gardens in the Prati di Castello), an important inscription has come to light, describing how, in the first year of our era, 754 of Rome, under the consulship of Caius Cæsar and Lucius Paullus, a freedman named Lucius Lucretius Zethus was warned in a vision by Jupiter to raise an altar in honor of Augustus, under the invocation of *Mercurius Deus Æternus*. Following these directions, Lucretius Zethus had the altar made, and dedicated it not only to Mercury-Augustus, but to Jupiter, Juno, Minerva, the Sun, the Moon, Apollo, Diana, Fortune, Ops, Isis, Piety, and the Fates. From an epigraphic point of view this monument ranks amongst the very best discovered in the works of the Tiber."—RODOLFO LANCIANI, in *Athenæum*, April 25.

DISCOVERIES IN THE FORUM OF AUGUSTUS.—In vol. v, pp. 114–5 and 221 of this JOURNAL, an account was given of the discoveries made during the excavations in the Forum of Augustus. A supplement is given by the *Bull. Comm. Arch.* (1890, pp. 251–59) by Sig. Gatti, describing both the fragments of sculpture and of inscriptions found over the surface of the forum.

Sculpture.—(1) Torso of a military statue, over life-size, with corslet: it is headless and without legs. The chlamys is not draped over the left arm as usual but passes from the right shoulder to the left arm in graceful folds, as in a statue of Trajan in the Villa Albani. This *paludamentum*

is unique among military (imperial?) statues in having a fringed border. The work is delicate but badly injured. (2) Trunk of a male statue, with toga, over life-size. (3) Life-size male head, the portrait of a beardless middle-aged Roman with thin hair, badly damaged and lacking the lower part, but of excellent art. (4) Female head, slightly under life-size; portrait of a Roman lady with headdress of the time of Trajan and Hadrian.

Architectural fragments.—The pedestal of one of the piers which divided the southern hemicycle from the area of the forum still remains in place. To them were engaged channelled half-columns of cipollino of which two large fragments were found. There also remained in place a considerable part of the pavement formed of large rectangular slabs of African, grey, cipollino, yellow and purple marbles. To the decoration of the portico which rose on both sides of the temple of Mars Ultor, belong the shafts of columns of *giallo antico* which have at all times been found here, especially during the last excavations. The fragments of cornices, architraves and the capitals are nearly all of the finest workmanship.

Inscriptions.—The inscribed fragments found belong to two distinct kinds of monuments. Some are remains of plinths on which were erected the famous honorary statues placed here by Augustus: others are pieces of large framed slabs. On the former were simply inscribed the names of the persons to whom the marble statue was erected with the note of the offices filled by him. The latter contained the *elogium* or narration of the most noteworthy acts and especially of the triumphs which had honored these great leaders. The size of the plinths agrees exactly with that of the square niches cut in the hemicycle of the forum, where they must have rested. Under the niches were placed the slabs containing the *elogia* which formed a sort of marble revetment in harmony with the magnificent decoration of this noble structure.

Lanciani published three fragments of inscriptions from the plinths, relating to Appius Claudius, Cornelius Silla and Fabius Maximus. There are two others, one of which is too fragmentary for conjecture, while the other can only be in honor of L. Cornelius Scipio Asiaticus, brother of Scipio Africanus, who was consul in 564 and triumphed over King Antiochus in the following year. It was already known that three statues were erected to him, one on the Capitol, one in the family tomb on the Appian, another in Sicily in 561. Now we know of a fourth in the Forum of Augustus whose inscription can be restored thus:

L. Corneli^{us}VS. P. F. Scipio
asiaTICUS
Cos. praet. aed. cuR. TR. mil.

In regard to the fragments belonging to the series of *elogia* there are a number besides those published by Lanciani and already noticed in the JOURNAL; especially nine fragments of one and twenty-five of a second.

TOMBS ON THE VIA TRIUMPHALIS.—In the *Bull. Comm. arch.* for Nov. 1890, it was reported that to the left of the Porta Angelica along the bastions of the Vatican gardens there had been discovered the remains of a series of tombs which were anciently situated on the left side of the *Via Triumphalis*, which belong to the first half of the first century of the empire. In the Jan. 1890 No. some inscriptions are given which were found here. One is of the Apulei. Another is of Heraclitus son of Hermias of the city of Bargylia in Caria. The sentence *Βαργυλιήτης φυλῆς Ἀλατίδος* is written in latin letters: the tribe Alatis is new. To a third tomb belonged a cippus showing that it belonged to the poet Claudius Diadumenus. It is in the form of an elegant epigram, probably written by the poet himself, as follows:

D . M
CL·HIC·IACEO·DIADVME
NVS·ARTE·POETA, OLIM·CAE
SAREIS·FLORIDVS·OFFICIIS,
QVEM·NVMQVAM·CVPIDAE
POSSE DIT·GLORIA·FAMAE,
SED·SEMPER·MODICVS·REX
SIT·VBIQVE·TENOR, HYLLE
PATER·VENI·NOLO·MOVERE
TVMVLTV, HOSPITIVM·
NOBIS·SVFFICIT·ISTA·DOMVS
////////////////////
///CL·FRVCTIANE
B·M·F·

The verses are divided by special signs of punctuation. They show that Claudius Diadumenus, descendant of a libertus of Emperor Claudius and educated in literary studies, exercised at first important offices in the imperial household and then gave himself up entirely to poetry. The distich commencing *Hylle pater, veni*; expressed the right of burial given here to his father Hyllus. The monument was erected by Claudia Fructiane, probably wife of Diadumenus. A second cippus was erected by Diadumenus to his son Tiberius Claudius Hyllus, who died at 23, having been a *lictor popularis* of the class of *denuntiatores*, of which there was one for each *regio* of the city to announce the popular festivals.—*Bull. Comm. arch.* 1891, pp. 70–5.

OFFICE OF MARBLE CUTTERS, WORKERS AND SCULPTORS.—Sig. Lanciani publishes in the *Bull. Comm. arch.* (1891, pp. 23–36) a veritable monograph on the marble workshops of ancient Rome. He is led to it by the discovery, in Reg. XIII, in the Testaccio, of a private house in the midst of a region entirely devoted to shipping interests and containing nothing but ware-houses. It turned out to be the office of a marble cutter, whose yard contained some hundred columns to be put to his use. Passing from this to more general considerations Sig. Lanciani gives us details on the marble trade, on the quarter occupied by the marble cutters, on the discoveries of marbles made there since the sixteenth century, and finally on the traces of the residence there of real artists—sculptors and modellers. This quarter was in the Campus Martius.

DISCOVERY OF THE TERENTUM.—In the course of the diggings required for the opening up of the new Corso Vittorio Emanuele, Prof. Lanciani found after long search between the Palazzo Sforza Cesarini and the Chiesa Nuova, at a depth of about six metres, the three *enceintes* of Aradites patris, Proserpinae and Euripus where the sulfuric waters mentioned by Valerius Maximus were piped. It is the famous place Terentum or Tarentum with which are connected several of the most ancient legends of Rome and in which the secular games were performed. The topographers of Rome had placed it either near the mausoleum of Augustus or in the Circus Maximus. —*Chron. des Arts*, 1891, No. 10.

URN OF NERO'S NURSE ECOLOGE.—Sig. Lanciani writes: A marble cinerarium, inscribed with the name CLAVDIAE ECOLOGE PISSIMAE, was found in the region of the Vigne Nuove, between the Vie Salaria and Nomentana, about 175 years ago, embedded in the front wall of a farmhouse which is now the property of Signor Chiari. Although the Vigne Nuove are scarcely four miles distant from the Porta Pia the inscription had never been noticed by an antiquary. My attention was called to it by Cavaliere Rodolfo Buti, a learned and conscientious explorer of our Campagna. I saw the inscription on November 28, and considering that the site of the Vigne Nuove corresponds exactly to the site of the Suburbanum Phaontis, in which Nero's suicide took place—considering also that Signor Chiari's farm contains the ruins of a noble and extensive Roman villa of the first century—I was led to believe that the Claudia Ecloge mentioned on the cinerary urn found among the ruins of this villa 175 years ago may be identified with the faithful nurse who, together with Acte and Alexandria, paid the last honors to the corpse of her imperial nursling. I may add that this identification has been fully approved in archaeological quarters, especially on account of the *gentilicium* Claudia, which is “de rigueur” in a freedwoman of Nero. The finding of Ecloge's urn at the Vigne Nuove, among the ruins of Phaon's villa, makes us believe that the pious old woman must have been

buried, at her own request, on the very spot in which her favorite had stabbed himself; but this is a simple supposition, independent of the text of the epitaph, which contains only three words.—*Athenæum*, March 14.

ACTS OF THE QUINDECENVIRI.—Professor MOMMSEN will publish, in the *Monumenti Antichi* of the Roman Lincei, his commentary on the Acts of the *quindecimviri* recently discovered in the works on the Tiber.—*Athenæum*, April 4.

A collection of casts of Greek sculpture.—Demetrius Stephanovich Schilizzi, a British subject of Italian origin established at Athens, has given to the Italian government a very important collection of plaster casts from the principal monuments of Greek sculpture and architecture. The 324 cases containing it have already reached Rome.—*Rev. Arch.* 1891, 1, p. 241.

SCULPTURE DISCOVERED IN 1890.—The *Bullettino della Comm. Archeologica* for Dec. 1890 gives a catalogue of the sculptures discovered during 1890 by the archæological commission. The *statues* are: (1) statue of Fortune, about life-size, in 34 fragments, without the head, found on the Esquiline: (2) herm of Hercules, less than life-size, covered with lion's skin, and with bearded head, in an excellent decorative style: (3) headless female statue, life-size, representing Ariadne or a bacchante: (4) headless statue of an old peasant, dressed in the exomis and sheepskin, of good style, lacking the lower limbs and lower arms. The *busts* and heads are: (1) a head larger than life-size, of the III century, the portrait of a Roman, probably Imperial personage, and forming part of the statue of an emperor as Mars: (2) a life-size female head of a type like Faustina the Elder but with different head-dress: (3) a life-size male head resembling Trajan, of good work: (4) a good head, over life-size of a Roman matron of the third century; (5) head of a Cupid; (6) small head of a child of beautiful workmanship. *Reliefs.* (1) fragment of a large high-relief with the torso of a man—perhaps of Mars: (2) another fragment with a seated figure of Phaedra (?); (3) a head of Medusa of the pathetic type; *etc.*

There are no metal objects of much importance.

Of the *terracottas* the most notable are the following: (1) female seated statuette—probably a goddess—with Cornucopia; (2) headless and legless male statue in attitude of Sophocles; (3) head of Minerva, of Etrusco-Latin art; (4) well-modelled head of Venus; (5) fragment of a beautiful frieze in high-relief on which remains a figure of Silenus (?); (6) four decorative friezes with sea-tigers carrying genii, winged children carrying festoons, bust of bacchante giving drink to panthers, *etc.* Some of these and others here omitted have been already mentioned, vol. VI, p. 585.

SENTINUM=SASSOFERRATO.—A preliminary report has been made to the *Not. d. Scavi* (1890, pp. 346–50) in view of excavations to be under-

taken on the site of the ancient city of Sentinum near Sassoferrato. The identity of the site is proved by numerous inscriptions mentioning the *ordo* and *plebs* of the Sentinians. The city lay nearly at the junction of the streams Marena and Sanguirone with the Sentino. To the south rose the acropolis placed on a natural elevation and fortified by strong walls. Of these walls and of those that surrounded the city the foundations remain almost everywhere. They are constructed of small parallelipeds of calcareous stone, while the summit must have been formed of large blocks of travertine which have been for the most part removed and used for building material.

Five years ago in reconstructing the provincial road from Fabriano to Sassoferrato which passed through Sentinum numerous remains of private buildings were uncovered as well as a main road paved with large polygonal slabs which appears to have been a decuman road: at right angles with it there run drains which appear to indicate the existence of cardinal roads.

The magnificence of the private buildings of Sentinum is shown by the heavy stone walls and fine mosaic pavements. Such are that now in Glyptotek of Munich representing the sun and the signs of the Zodiac and the earth with the seasons. A second mosaic represented the sea full of fishes. A third mosaic, twelve metres square is now in the *vigna* Ippoliti and is remarkable for marine and fantastic animals: it doubtless belonged to some baths. Remains of a public building, perhaps a theatre, were uncovered in August: here, in a subterranean vault a number of objects in bronze and marble were found. Such were: a tragic and a comic mask; part of a colossal figure in military costume; many parts of columns; several hundred pieces of marbles for wall-decoration; a wooden casket decorated with plaques of bone and ivory covered with decoration of oves and figures (a Victory). Near the city part of an equestrian statue of excellent workmanship was found.

VHÒ (near Cremona).—**PREHISTORIC DEPOSITS.**—Sig. Parazzi publishes in the *Bull. di. palet. Italiana* (1890, pp. 85–97) the results of his excavations at Vhò, on the road from Cremona to Mantova. In some black earth numerous flint knives had been found; this led to the investigations. In the stratum of black earth were found bits of vases sun-dried, numerous knives, blades, pieces of flint, bones of animals; but no clear ashes or coals such as abound in the *terremare* or deer horns or piles or bronzes or arrows or lance heads or spindles. The diameter of the basin of earth was eight metres. This appears to have been a flint work shop under cover. Around it were evidently huts, perhaps a village of the stone age. The entire neighborhood abounds in prehistoric remains, showing in the upper region of Vhò between the Oglio and the Delmona there originally existed a numer-

ous population during the stone age. The stone objects found are of the greatest variety.

CHRISTIAN ANTIQUITIES OF ITALY.

BOBBIO.—THE EARLY-CHRISTIAN TOMBS OF COLUMBANUS AND HIS FOLLOWERS.—Miss M. Stokes exhibited to the *Society of Antiquaries* of London, on March 19 one hundred illustrations of the vestiges of Irish saints in Italy in the dark ages, and the Director read a paper by her on "The Tombs of Columbanus and his Followers at Bobbio," Attalus, Congal, Cummian, and others, whose names are given by Padre Rossetti in his catalogue of the followers of Columbanus, but in their Latin forms, the Irish equivalents to which are omitted." The tomb of Columbanus is a white marble sarcophagus (formerly surmounted by a marble recumbent statue of the saint) the front and sides of which were adorned with bas-reliefs illustrating events in the life of the saint. Among the interesting features in these bas-reliefs should be noted the book-satchel carried by St. Columbanus in the first, and the water-vessel presented by Gregory the Great to the saint at the consecration of his monastery, in the central compartment. This sarcophagus stands as an altar in the crypt of the old Lombardic church dedicated to the saint at Bobbio, while the tombs of those disciples who followed him from Ireland to Italy are ranged in the walls around that of their master. The sculptures on five of these sarcophagi offer fine examples of the interlaced work described by Canon Browne at the meeting of the Society held on February 19th as found in Italy at this period and before it, even in the time of imperial Rome. Such patterns were spoken of by Miss Margaret Stokes in her paper read upon the same occasion as gradually introduced with Christianity into Ireland, and there engrafted on a still more archaic form of Celtic art. Thus an Irish variety of such patterns sprang into life. The fact that there is no trace of such Irish individuality in the decorations on the tombs of the Irish saints at Bobbio, that there is nothing to differentiate these designs from those that prevailed throughout Lombardy in the seventh century, goes far to prove that this style did not come from Ireland into Italy. Whether, on the other hand, it reached the Irish shore borne directly from Lombardy by the passengers to and from Bobbio to its parent monastery in Bangor, co. Down, is yet matter for future research. The next monument described was the marble slab inscribed to the memory of Cummian, bishop in Ireland at the beginning of the eighth century. We learn from the epitaph itself that Liutprand (King of Lombardy from A. D. 720 to 761) had the monument executed of which this slab was the covering, the artist's name, Joannes Magister, being given at the foot. The inscription consists of nineteen lines, twelve of which are laudatory verses in hexameters, the remaining portion being

a request for the saint's intercession. The knife of St. Columbanus, described by Mabillon in 1682 as well as by Fleming, is still preserved in the sacristy of the church. It is of iron, and has a rude horn handle. The wooden cup out of which the saint drank is also preserved, and in the year 1354 it was encircled by a band of silver, with an inscription stating that it had belonged to St. Columbanus. The bell of the saint is another relic, and it is known that on the occasion of the translation of the saint's relics to Pavia this bell was carried through the streets of that city at the head of the procession. The vessel brought by Pope Gregory the Great from Constantinople, and given by him to St. Columbanus at the consecration of his monastery, agrees in form with that which is represented in the bas-relief on the saint's tomb, and is said to have been one of the water vessels used at the wedding feast at Cana in Galilee. A silver bust representing the head of St. Columbanus completes the list of relics connected with this saint which are still preserved in the sacristy of his church at Bobbio.—Rev. Prof. Browne said he had now had the opportunity not only of seeing Miss Stokes's careful drawings and diagrams, but of discussing the matter with Miss Stokes herself, and he was glad to be able to say once and for all that the Hibernian theory of the Irish origin of interlacing ornament in Italy was now quite dead.—With regard to the date of the remarkable vase preserved at Bobbio, and said to have been given to St. Columbanus by St. Gregory, the President Dr. J. Evans thought the vase was quite as early as, if not earlier than, St. Gregory's time, and probably of Greek origin.—*Athenæum*, March 28.

COMO.—DISCOVERY OF SILVER COINS.—Early in February a treasure-trove of about 6000 silver coins and other pieces of the XIV century was made in Como. Among them were 52 coins of Como, all of Azzo Visconti; 686 of Pavia; 4 of Cremona, and more than 5000 of Milan. A full report has been made upon them by Dr. Ambrosoli in the *Rivista Italiana di Numismatica* (1891, p. 163).

GIFTS TO THE ARCHÆOLOGICAL MUSEUM.—In a recent number of the *Rivista archeologica della provincia di Como* a report is published on the gifts made during 1890 to the archæological Museum of Como, whose importance is rapidly increasing.

MILAN.—THE LOMBARD SCULPTURES OF CAIRATE.—We summarize as follows Sig. Carotti's report on the early Lombard sculptures of Cairate. Cav. Seletti recently gave to the Museum of Milan two mediæval sculptures which came from Cairate on the Olona, in the building of the ancient Benedictine nunnery dedicated to S. Maria Assunta. Attracted by information regarding some ancient paintings still existing in this ancient structure, now private property. One of the owners gave him for the Museum a capital in sandstone. It is still an imitation of the Corinthian

type but very debased, on the same plan as those in the baptistry of Cividale (737 A. D.) and the ciborium of S. Giorgio di Valpollicella (712 A. D.). The body is cubic, the four acanthus groups take almost the form of shells. The rectangular abacus has the interesting decoration of twisted rope used in Lombard works between the VII and XII cent. The origin of the monastery of Cairate goes back to the VIII cent. to a bull of Liutprand and Hildebrand of 774, followed by a papal bull of John VIII in 874. The capital would indicate the existence at this period of a modest construction by an essentially local art. A narrow frieze with two doves remains also from this time. Among its ruins were found the two fragments of sculpture given by Cav. Selletti. One represents a lion with the book—the symbol of St. Mark: the other represents a seated figure holding a book (probably St. Matthew). With the assistance of ANNONI's old work (*Tre statuette di signore Longobarde, già del soppresso monistero di Benedettine in Cujrate*) three statuettes now fastened into the wall of the central court of the Ambrosian library were identified as also coming from this monastery of Cairate. They are of the same style and workmanship and all seem from intrinsic evidence to date from the foundation of the monastery in 742. Two of the statuettes are 93 cent. high, the third measures 62 cent.: they are in extremely high relief and of great rudeness. Compared with other early Lombard pieces they most resemble the reliefs of the altar of Pemmo at Cividale (744–79 A. D.). The latter are in very low relief, so that in the sculptures of Cairate we have examples of Lombard art which are unique for two reasons,—their high relief and the complete lack of any foreign influence, especially the Byzantine, which is evident at Cividale.

A reconstruction of the monastery took place in the XIII cent. The cloister with its double portico several times rebuilt preserves on the lower story a row of columns with capitals of the XIII century. These capitals have the alternate arms of the Torriani and Visconti. The reconstruction, therefore, must date between 1257, the year when the Comasks encamped at Cairate to succor the nobles against the Milanese, and 1262 in which first broke out the hostility between the Torriani and the Visconti.

ADDITIONS TO THE MUSEUM.—The additions made to the department of the Middle Ages and Renaissance in the museum of Milan (Brera) during the year 1890 are given with the prehistoric and classical antiquities on pp. 154–5 in order not to divide the report. The reader is referred to this page.

RIETI.—**DISCOVERY OF MANUSCRIPTS.**—In the ex-convent of Sant Antonio del Monte near Rieti a notable group of manuscripts has been brought to light which since 1860 had remained hidden in the recess of a vault. Prof. Monaci has examined them on behalf of the government and reports that of the seventy-one manuscripts fifty-eight are important. Although they

do not contain new matter, still, either on account of the great age of some of them—the x and xi centuries—or for the beauty of their calligraphy and from being dated, and, finally, on account of the illuminations of others, they constitute a group that would do honor to most collections. The subjects are mostly theological or of canon law.—*Arch. Rom. di St. Patria*, 1891, p. 205.

ROMA.—AN EARLY MANUSCRIPT.—Padre COSSA-LUZZI has prepared for publication in phototype the Vatican codex of the Prophets, which dates from the sixth or seventh century. It will be accompanied by a commentary from Professor Ceriani, of the Ambrosian Library at Milan, and will appear shortly.—*Athenæum*, March 21.

HOUSE OF JOHN AND PAUL.—Padre Germano continues with perseverance his excavations under the basilica of SS. Giovanni e Paolo which he is now describing in the pages of this JOURNAL. He has cleared out several new halls during the winter and found new paintings of a rather barbarous style representing soldiers dividing Christ's garments, Christ in the tomb, the Descent into Limbo, *etc.* It is thought that the date of these paintings is about the eighth century. They form another link in the series of frescoes of the ancient house which cover a period of some eight hundred years, from the third to the eleventh century. We call our readers' especial attention to Padre Germano's important series of papers in the JOURNAL: they form the first complete and official report on these unique excavations so interesting for students of early Christian art and history.

CATACOMB OF SS. PETER AND MARCELLINUS.—Mgr. Wilpert has lately discovered in a half-filled *cubiculum* of the catacomb of SS. Peter and Marcellinus on the Via Labicana, traces of an important series of paintings covering its vault. They date from about the middle of the third century. The vault is divided into nine compartments, five of them rectangular, the other four, placed at the angles, being circular. Near the entrance is a woman seated before whom a figure stands, speaking. This subject is shown, by the two following, to be the Annunciation. These latter represent the adoration of the Magi, in the usual form, and the Magi themselves, who point to the star which has the pre-Constantinian form of the monogram of Christ. In another compartment the Saviour is curing the blind man with his right hand. In the centre of the vault Christ is seated on a throne surrounded by saints, the scene of special judgment. Finally at the corners are *oranti* representing the souls of those buried in this *cubiculum*. The importance of these paintings lies especially in their significance and connection, as they form a complete symbolic and didactic cycle.—*Rev. de l'art Chrétien*, 1891, p. 271.

A MEDIÆVAL MUSEUM IN THE VATICAN.—Great and expensive preparations are being carried on at the Vatican for the installation of a Mediæval

museum in the famous Borgia apartments. It is to receive the numerous paintings and works of art of the Middle Ages and early Renaissance which have hitherto been crowded into the cases and wardrobes of the Museo Cristiano. Until now it has been almost impossible to study a large part of this collection, hidden as it was behind wooden doors. The collection of small Byzantine paintings of various periods is unique and those of enamels, including many fine examples of early Limoges work, and of carved ivories are large and of the highest interest. But few of them have been described in print, and still fewer illustrated. [The editor spent, years ago, several months in making careful descriptions of several hundred of these pieces and can testify to the fact that they will prove a fruitful source of study for students of the history of art. A. L. F., Jr.]. The collection of paintings of the XIV and XV cent. includes several works of unusual excellence especially of the Umbrian school.

CATACOMB OF PRISCILLA AND BASILICA OF ST. SILVESTER.—In the last number of Comm. De Rossi's *Bull. di arch. cristiana* (*Serie V, Anno I, No. 2-3.*) the learned writer gives a preliminary report on his discovery of the basilica of St. Silvester already alluded to.

It was already known that the early and important historical crypts discovered during the past few years in the cemetery of Priscilla should be divided into two groups. The first is that of the hypogeum of the Acilii Glabrones, which has been already described; the second reached from the last cubiculum of the Glabrones is the *cubiculum clarum* of the martyr Crescentianus. Here also the graffiti of visitors are numerous. In one of them the reason is expressed for the veneration in which this spot was held. As the basilicas erected over the tombs of the apostles in Rome were called *limina apostolorum*, so these crypts of the cemetery of Priscilla were termed in these graffiti *limina sanctorum*. New discoveries have simplified the description of the crypts of S. Crescentianus. These were the *confessio* of an open air basilica erected by Pope Sylvester above the catacomb. The itineraries of the seventh century speak of ascending to the basilica of S. Silvester in visiting this cemetery; the stairway that leads down to the crypts of Crescentianus or Crescentius. Excavations at the top of it showed the ruins of rased buildings which were found to be a basilica surrounded by Christian oratories and mausoleums. The staircase opens up near the *bema*, as is customary. As the work of excavating the ruins was not finished at the time of writing the full report is delayed.

The basilica was completely razed and despoiled, doubtless at a time of invasion. No fragment of inscription or of sculpture has yet been found. But from the foundations of the buildings it is easy to perceive the form of the apse, the site of the altar and the remains of a couple of the papal tombs.—*Chron. des Arts*, 1891, No. 4.

A graffito of the year 375.—On the wall of a staircase in the cemetery of Priscilla is a graffito traced on the cover of an arcosolium which is unique in character. On the first line we read: *In pace*; on the following lines . . . *I idus febr. cons. Gratiani III et Equiti Florentinus, Fortunatus et (Fe) lix ad calice benimus* (for *ad calicem venimus*). In the first place this is the first graffito dated by year and day: its date is 375 A. D. Secondly the formula *ad calicem venimus* is entirely new. The graffito, it should be observed consists of two parts, the *in pace* being earlier and the rest commemorating a visit in 375 to the tomb on which the graffito is scratched. The explanation is that, as we learn from ecclesiastical writers the pagan habit of coming on certain occasions to eat and drink at the tombs of relatives and friends was continued by Christians and the rioting and drunkenness that it led to are the occasion of much criticism and led finally to severe steps for its repression. *Ad calicem (sumendum) venimus* records this rite performed in honor of the defunct by Florentinus Fortunatus and Felix, and this graffito is the first and only allusion to the habit in the range of Christian epigraphy.—DE ROSSI in *Bull. arch. Crist.*, v, 1, 2-3.

CHRISTIAN INSCRIPTIONS.—In the Campo Verano three fragments of inscriptions have been found belonging to the ancient Christian underground cemetery which existed there. They originally closed loculi. The name Quiracos which occurs in one is interesting because the catacomb itself, in which the martyr. St. Laurentius was buried, is eponymous of one Ciriaca and this name has been met with in a number of inscriptions from this site showing in the persons some relationship to the martyr. The second inscription is a metrical epitaph whose importance lies in its being a record of the burial in this cemetery of a sacred virgin. Comm. de Rossi some time ago demonstrated that the epitaphs of sacred virgins which have come in considerable numbers from this Christian cemetery and belong to the fourth and fifth centuries show that there must have existed in the *Agro Verano* one of the very earliest of the ascetic houses of the Roman church where virgins and widows lived together in monastic fashion retired from the world.—*Bull. Comm. arch.* 1891, p. 77.

SARDINIA.

A FOUNDRY OF THE BRONZE AGE NEAR LEI.—Sig. Vivanet reports in the *Scavi* (1890, pp. 334-6) the discovery in the commune of Lei of a number of ancient bronzes which have been placed in the museum of Cagliari. They include statuettes (of the usual warriors) lances, axes, pestles, armlets with linear decoration, poniard handle, rings, etc.

In the same locality, which is of granite formation, there were found many pieces of rough *caolino* and volcanic stone brought here apparently

to make receptacles for fusing metal. Besides finished objects there were pieces of mineral of irregular shape, the remnants of the pyrites fused to obtain copper. It is therefore to be concluded that we have here another important factory of the bronze age, in the place called *sa Maddalena*.

The many nuraghic constructions which are found in the neighboring mountain and valley, especially the latter, show that this was an important centre of population which may have encouraged the development of a foundry. The now semi-destroyed nuraghe called *Muros de Rosario* placed a few dozen meters away on the summit of the hill may have been the artisans' dwelling.—*Not. d. Scavi*, 1890, pp. 334-6.

THE SITE OF THE ANCIENT CARES.—The ancient *Cares*, placed near Olbia has been incorrectly located by all authorities. It is in reality situated about eight miles N. W. of Terranova in a territory still called *Caresi*, in an uncultivated spot of square shape along the slope of a hill. The ancient city extended into the plain below. There are many remains of it, the most notable being a ruined building measuring 58 by 23 met. divided into seven rooms, by internal walls, all of stone. Two gold coins and rods of bone have been found inside it. In a considerable radius are other buildings some arranged in regular lines, some in confused groups, some quite isolated. Between two lines of ruins are the remains of an ancient paved road and where it is interrupted are the remains of a circular building where starts a wall that joins another transverse wall. There seem endless ruins and remains of streets. What the extent of the ancient city may have been is difficult to ascertain on account of its extending on one side into thick woods. One of the greatest of the modern destructions from which it has suffered took place some thirty years ago when it was used as a quarry and its stone transported everywhere. Hence the well-known local proverb: *s'abba in su mare e sa pedra in Caresi* or "you find water in the sea and stone at Caresi." At the beginning of this century a great part of the walls were still standing. Sig. Tamponi undertook lately some excavations among the ruins but they were unsuccessful.—*Not. d. Scavi*, 1890, pp. 363-6.

SICILY.

STENTINELLO.—**NEOLITHIC STATION.**—Professor ORSI has just published his report on the neolithic station of Stentinello. This prehistoric village, near Syracuse, contained a group of dwellings built upon a natural terrace of *tufo*, about five metres above the level of the sea, all of which are now destroyed. The village was girded by natural trenches in the rocks, which served for drainage. Amongst the objects found are some of obsidian, flint knives, axes in basalt, carved bones, and fragments of large earthenware vessels imperfectly baked at an open fire, the oven not then being

known. The vases are decorated in geometric style, before baking, with a hard stick, or even with the human nails; some, however, showing a more advanced period when blocks and puncturing were in use. The handles are mostly circular, strong, and broad. The rude body of an animal (fragmentary)—of which the head (now wanting) was fixed separately by means of a wooden stick—was found amongst the *débris*. Another rude terracotta is of a horned animal; and a third is a human body now without head or arms, the latter made separately.—*Athenæum*, May 16.

The report alluded to by the *Athenæum* is published in the *Bullettino di Paletnologia Italiana* and its importance will justify a full summary in the next number of the JOURNAL.

SYRACUSE (near).—EXCAVATION OF THE NECROPOLIS OF MEGARA HYBLAIA.
—In January the Italian government commenced excavations in the necropolis of Megara Hyblaia, near Syracuse. After a month's excavation, Dr. Orsi reached the oldest part of the necropolis. At the outset he was rewarded by finding a tomb of a woman, with two fine silver *fibulæ* at the height of the shoulders, and on the breast some silver rings with Phœnician *scarabæi*, and also a large chamber sculptured with an elegant border round the top representing archaic leaves entwined with astragals, all splendidly preserved. Dr. Orsi has now come on a rich mine of proto-Corinthian vases and silver objects. In one tomb containing three infant skeletons were found nineteen buttons of thin silver; three spirals also of silver; twenty-one silver rings, ten being on one finger; a long necklace of twisted wire; a girdle richly decorated with *repoussé* lines and geometric figures, like the Olympian blades; together with some very small but elegant bronze brooches, some in the form of a horse, some in that of a boat, with other brooches in wood, bone and iron—a rare collection for one tomb, but unfortunately in bad condition. These brooches are important as they resemble in type those belonging to the Italian cemeteries of the first age of iron, while they are very rare in Greek tombs, especially in Sicily. In another tomb were found a gold button and a fine gold rosette with six *repoussé* leaves. Outside the necropolis, near the pharos of Lumidoro, below the sea-level, Dr. Orsi has been able to trace out the quay of the ancient port of Megara Hyblaia, formed of huge blocks of limestone. The wall is more than five metres in width. All the objects found will be placed in the museum at Syracuse, of which Dr. Orsi is director.—*Athenæum*, April 4.

SPAIN.

GRANADA.—FIRE IN THE ALHAMBRA.—On Sep. 15, a violent fire broke out in the Alhambra. The Sala de l'Alberca and a part of the court of the Arrayane were alone destroyed, and an architect from Madrid is already

busy reconstructing them. A few days before the fire, several works of art had been stolen from the Alhambra and it is conjectured that the fire was started to cover the theft.—*Chron. des Arts*, 1890, No. 31.

QUILLENA.—*Discovery of a dolmen*.—Two Sevillian archæologists, José Cascales and Felicien Candan, have discovered near Quillena a corridor dolmen, the only one of the kind hitherto known to exist in Andalusia. The walls of this construction, whose section is trapezoidal, are formed of enormous unhewn stones, 1.25 met high, connected without cement. The roof is formed of very wide slabs whose dimensions are as large as 2.15 by 1.15 met.—*Rev. Arch.*

FRANCE.

CONGRESS OF LEARNED SOCIETIES AT THE SORBONNE IN 1891.—The following is an extract from the program of the section of archæology at the great annual congress attended by delegates from all the learned societies of France, which meets at the Sorbonne. It gives the topics within whose limits the papers and reports were kept.

(1) Notices of inventories of private collections of antiques, statues, reliefs, coins, found in the provinces between the xvth and the xviiith cent., with the object of tracing the history of monuments in the museums of to-day.

(2) Recent discoveries of milestones or signs of ancient roads which may serve to determine the line of Roman roads in Gaul or in Africa.

(3) Study in a determinate region of Africa all the ancient buildings, such as triumphal arches, temples, theatres, *etc.* and draw up plans. This is in view of the fact that a passion for epigraphy has led to the neglect of the monuments in Africa, especially those of early Christian period.

(4) Notify of the antiquities preserved in provincial museums which are of an origin foreign to the region.

(5) Call attention to notary acts of the xiv–xvi centuries containing information on artists' biographies, especially contracts relating to paintings, sculptures or other works of art.

(6) Draw up a list, accompanied by plans and drawings of the Christian buildings of a province or department considered anterior to the year 1000.

(7) Study the characteristics which distinguish the various schools of architecture during the Romanesque period with especial stress on the constitutive elements of each monument (plan, vaults, *etc.*) This is to encourage monographs treating of the common characteristics of buildings in a department, a diocese or an arrondissement.

(8) Statistics of monuments of military architecture of various periods, with notice of historical documents that serve to date them.

(9) Note the rural constructions erected by monasteries or individuals, such as granges, mills, *etc.*

(10) Documents relating to naval architecture.

(11) Point out in each region of France the centres for the manufacture of works in precious metals during the Middle Age. Indicate the characteristics and especially the marks and stamps by which they can be recognized.

(12) Seek on figured monuments of antiquity or the Middle Ages the representations of implements of trades. It is often difficult to identify the age and use of such when they are found.

(13) Study the centres for the manufacture of ceramics in ancient Gaul, and the places where this industry has been handed down to the present time.

(14) Collect written or figured documents illustrating the history of costume in any special region.

(15) Study in the *Acta Sanctorum* among the biographies of saints of any region of France, what may interest the history of art in that region.—*Rev. de l'art Chrét.* 1891, pp. 179–181.

ST. DENIS AND THE BEGINNINGS OF THE TRANSITIONAL STYLE IN FRENCH ARCHITECTURE.—The abbey church of St. Denis was the subject of an interesting discussion at the last congress of learned societies at the Sorbonne.

That work was begun in 1140 and not in 1137 was demonstrated by M. Anthyme Saint-Paul from a careful study of a document. The façade must have been built in five or six years, and its date being certain, the part of the vestibule placed under the towers belongs to the same period. The ribbed cross vaults placed here are worthy of study on account of the heavy profile of their ribbing. The choir was erected between 1140 and 1143 and is a remarkably bold construction. It is possible that the churches of Poissy, of St. Maclou of Pontoise and of St. Martin des Champs were built under Suger's inspiration: they may be therefore considered as the prototypes of the basilica of St. Denis, which is the first Gothic church. Such were the views expressed by M. Anthyme Saint-Paul. On the other hand M. de Lasteyrie objected to calling Saint-Denis the first Gothic church. It is but one link in a chain of transformations lasting from the close of the eleventh up to the thirteenth century. It certainly had considerable influence in the entire district; but all its essential characteristics are to be found in other buildings of the same or of an earlier date, like St. Etienne of Beauvais or Morienval. M. Anthyme Saint-Paul did not lay sufficient stress upon the chronological order of the other buildings of the same type which remain. He supposes the church of Poissy and that of Saint-Maclou of Pontoise to be earlier than St. Denis, but what is there to prove it?

* M. E. Lefèvre-Pontalis called M. Anthyme Saint-Paul's attention to the fact that the church of St Maclou of Pontoise must, on the contrary, have been built some time after the basilica of St. Denis, as is proved by the

ossature of the vault of the deambulatory, the only part of the building that still dates from the twelfth century.—*Rev. de l'art Chrét.*, 1891, p. 179.

BAPTISMAL FONTS.—M. P. Saintenoy has contributed to the *Société d'archéologie de Bruxelles* a detailed monograph on baptismal fonts from the baptisteries to the XVI century. Among other points discussed is that of the various centres for the execution of fonts in bronze and marble during the Middle Ages, especially in Belgium and north Germany. The monuments are classified as: baptisteries, piscinae or baptisteries with raised borders, fonts with aedicula over them, baptismal vases, etc.—*Rev. de l'art Chrétien*, 1891, p. 247.

LE MOITURIER, THE SCULPTOR OF AVIGNON, AND JACQUES MOREL.—In the *Gazette des Beaux Arts* and the *Chronique des Arts* (No. 11 of 1891) many new and interesting facts are noted in regard to two sculptors of the XV cent., Jacques Morel and Antoine le Moiturier, both of whom were among the first sculptors of the great Burgundian school which started the Renaissance in northern France.

A FRENCH PAINTER OF THE XIV CENT.: JEAN COSTE.—M. Bernard Prost has lately published, in the *Archives historiques, artistiques, et littéraires* a very interesting document found in the Archives Nationales (K 44, No. 6). Documents on French painting during the XIV cent. are extremely rare. The one in question seems to relate to the famous Jean Coste, painter of King Jean and presumed author of the portrait in the Bibliothèque Nationale. It presents the double interest of describing an important decorative work executed in one of the most magnificent châteaux of France and of furnishing precious information regarding the technique of the art of the day and its special vocabulary.

It is an account for the year 1345; Jean Coste had been charged in 1340 by the duke of Normandy with various important work in the chateau of Vaudreuil and at Paris. The following is the tenor of the account of Gisors, in modern orthography.

“Pour faire en la chapelle du roy, peindre là et faire en lad. chapelle environ XII toises de long et III toises de lé, et doit être le ciel de lad. chapelle lumandé (sic) des armes de France, et sera le lambris peint d'une couleur futine,¹ les trez² et les ponchons³ d'azur semés de fleurs de lis, les bases, les chapiteaux, voûte, de vermillon, de vert et d'arpel,⁴ les ogives de fin vermillon et de fin vert, tout fait à l'huile, et les joints de la couleur des trez, les sablières d'une orbe voie faites en filatières;⁵ les côtés de lad. chapelle roussés et quartellés⁶ de blanc refendu de brun; pour le clotet,⁷ tout le comble vert estencele⁸ d'orpel, les ogives de fin vermillon,

¹ Wood color.

² Beams.

³ King-posts.

⁴ Imitation gold.

⁵ Scallops.

⁶ Checkered.

⁷ Aedicula reserved to the royal family.

⁸ Studded.

voûte d'orpel, et les reprises⁹ semblablement, les joints d'azur semés de fleurs de lis, les sablières, voûte, de fin vermillon et de fin vert à l'huile et d'orpel, et les murs de draps¹⁰ roüés¹¹ de France, de Bourgogne et de Normandie; et le contre coeur de l'autel, la table peinte des *Ymages de la Passion* et le champ de fin vert estencele et de fin or et les diadismes¹² de fin or et le devant armoyé de France et de Bourgogne. Pour ice avoir fait bien et convenablement par *Jehan le peintre*, à icelui baillé à rabais, pour tout xv livres."—*Chron. des Arts*, 1891, No. 15.

AN HISTORICAL PAINTING BY JEAN FOUCKET.—Though it was known that the great Jean Fouquet was painter to King Louis XI, none of his work done for the court had been identified. M. Durrieu has found the copy of the statutes of the *Ordre de Saint-Michel* (*Bib. Mat. Ms. Franç.* 19.819) which belonged to the king, its founder. On the first page is an admirable illumination representing the holding of the first chapter of the order. All the heads of the figures are admirable portraits, and from them and certain details of costume and a comparison with other monuments M. Durrieu has been able to identify, beside Louis XI, duke Charles of Guyenne, his brother, duke Louis II of Bourbon, the count of Roussillon, admiral of France, grandmaster Antoine de Chabannes, count Dammartin, Jean Bourré, governor of Charles VIII, the poet and author Jean Robertet, etc. *Revue Crit.*, 1890, II, p. 408.

TREASURIES OF ST MAURICE D'AGAUNE AND OF SION.—M. de Mély publishes in the *Bulletin* of the *Comité des Travaux Historiques* a study on the contents of the treasures of St. Maurice d'Agaune and of Sion. For the former he makes rectifications in the magnificent monograph of M. Aubert adding much to the description of the reliquary of the Ste. Epine and the Merovingian reliquary. He shows that the so-called antique cameo on its front is a *verre filé* whose singular technique he explains: this may lead to the discovery of the same fact in the case of other so-called cameos. In the treasury of Sion he studies especially two pieces; the small reliquary of St. Althea, a work of the VIII century, restored in the XII, and the chef-d'œuvre of the collection, a coffer containing relics of the Theban legion and dating from the middle of the XIV century. It is a work of great interest though hardly noticed. It is covered with plaques of silver gilt, stamped, pierced *à jour*, representing alternately a king and a queen enthroned in a quatre-feuille in high relief. The ground is decorated with plaques of silver enamelled and gilt, with most delicate translucent enamels. A multitude of wonderful details make of this piece a jewel.—*Revue de l'art Chrétien*, 1891, p. 246.

⁹ Brackets.

¹¹ With coats of arms.

¹⁰ Draperies.

¹² Diadems.

FORM OF THE CROSS OF THE CRUSADERS.—M. de Mély communicated to the *Académie des Inscriptions* (April 25) the reproductions of some monuments that show the form of the cross worn by the first crusaders. These monuments are: the glass windows of St. Denis, given by Suger; a miniature in a manuscript at Bern, representing Frederic I; and a panel in the reliquary of Charlemagne at Aix-la-Chapelle.—*Revue Crit.*, 1890, I, p. 360.

PROPOSED MUSEUM FUND AND THE VISCONTI-ARCONATI LEGACY.—The movement to establish a *Caisse des Musées* or fund destined to enable the French museums to make large purchases of works of art was alluded to on p. 390, vol. VI of this JOURNAL. It seems to have been made a possibility by a most munificent act of Mme. la Marquise Visconti-Arconati, daughter of the recently deceased senator Peyrat. This lady wished to arrange in advance the disposal of her large fortune and has made a will including legacies to hospitals in Italy, to the city of Brussels, to the Institut de France, the Bibliothèque Nationale and the Museum. This last legacy makes the state heir to the sum of *eight millions* of francs whose income is destined to increase the collections of the Louvre and Cluny museums. In case the *Caisse des Musées* is in operation when the legacy comes due, it shall have the disposal of this income. Otherwise the state itself shall employ it in purchases in the proportions of one-fifth for the Cluny museum and four-fifths for the Louvre. This is therefore, says M. Gonse in the *Chron. des Arts* (1891, No. 4), "a peremptory reason, a unique occasion for our law-givers to vote the creation of a museum fund which can alone give to our artistic acquisitions that breadth and elasticity that are so necessary. In reality it needs nothing but a simple authorization on their part; that the principle of the financial autonomy of our museums should be recognized in the budget: the rest will come of itself. The Sevène and Barellier funds will form a first nucleus . . . example is contagious; we know of amateurs ready to open their pursestrings as soon as they know at what door to knock. It is indispensable that by the time the Arconati legacy comes into operation the Fund should have been organized and have given proof of vitality." The Louvre can preserve its artistic supremacy only by some such means as this.

ANNECY.—GALLIC DISCOVERIES.—Dr. Thonion communicated at a meeting of the *Soc. des Antiquaires* (April 9), the results of a discovery under a tumulus constructed of uncemented stone in the neighborhood of Annecy. The objects found are Gallic and consist of swords, fibulae, lance-heads, bracelets, bear-teeth, etc. M. Flouest adds that these objects belong to the last period of Gallic independence before Caesar's invasion.—*Revue Crit.*, I, 1890, p. 360; and *Bull. Soc. des Antiq.*, 1890, p. 176.

AVENCHES=AVENTICUM.—The Society *Pro Aventico* is zealously carrying on excavations at Avenches. A wall 8 ft. in thickness has been un-

earthed at the east end of the theatre, and also traces of the pavement around the theatre. It will soon be possible to give an exact picture of the theatre of ancient Aventicum. The excavators also came upon the grave of a young girl (whose skeleton was much damaged), and a great quantity of vases, pots, and small lamps made of a fine red clay. Not far from a spot which is supposed to have been the site of a temple, a marble hand, part of a foot, and the fragments of an inscribed marble tablet have been found.—*Athenæum*, March 7.

AVIGNON.—ITS ARCHITECTS OF THE XIV CENTURY.—M. Müntz continues to publish (*Chronique des Arts*, 1890, No. 31) his studies on the Architects of Avignon, with information derived from new documents. The earliest here mentioned is Maître Guillaume, *operarius* of the bridge of Avignon and constructor of that of Raudnitz in Bohemia. Bishop John IV of Prague (d. 1343), the great protector of art in Bohemia before the advent of Charles IV, became acquainted with this architect while at the Papal court, and invited him to Prague, where he came in 1333 with three other *operarii*. They build two piers and a vault, and left the rest to their Czech confreres, after working several years. This bridge was about 550 ft. long, was composed of seven piers and eight circular arches, and was destroyed during the Thirty-years War. He also built the choir of the conventual church of the Virgin at Raudnitz, begun in 1333 and finished in 1338.

The second document shows that Pierre Poisson de Mirepoix was appointed architect of the palace of the Popes at Avignon as early as the beginning of 1335. Also, in 1335, Benedict XII charged his brother *Johannes Piscis* to go to Rome to superintend the restoration of the basilica of St. Peter. A brief of Oct. 18, 1338 says, that he had shone in this *sedulam curam* and had caused to be executed *magnam partem reparationis et restaurationis hujus operis*. He died in 1338. Two other Frenchmen succeeded Jean Poisson. They were *Petrus* Canon of Arras and *Thomas Guirandus* of Avignon.

A third document of June 18, 1348, concerns the works undertaken on the palace by Clement VI and under the direction of Jean de Loubières. It tells us that *Johannes de Luperia, serviens armorum domini nostri ac magister operum palatii apostolici*, in preparing to go *ad partes Franciæ* charged *Guillelmus Richonie præparator seu director ejusdem operis* and *Herricus Godefredi alias dictus de Luperia*, a cousin-German of the above John, to *regere et gubernari* during his absence. They were also authorized to receive from the Apostolic chamber the regular payments of 70 florins per week of six work-days, 60 per week of five and 50 per week of four work-days.

Further researches have allowed M. Müntz to prove that to the architects of the palace of the Popes we owe the plans of the constructions undertaken at Montpellier by Urban V between 1364 and 1370; namely, the college of St. Benedict (now the School of Medicine), the Cathedral, and, finally, the Collège de Mende. On several occasions, Bertrand de Mause, one of the architects of the palace, made payments for these works, which he appears to have directed from a distance. One of his confreres, Henri Clusel, visited Montpellier to oversee. Even the architect-in-chief of the palace, Bertrand Nogayrol, oversaw at Avignon the execution of the stalls and paintings for the college of St. Benedict.

Finally, regarding the Pierre Obrier who was long considered the only architect of the palace, he is shown, by a document of 1376, to have been called indifferently *Petrus Obrierius* or *Petrus Operarius*.

MONUMENT OF CARDINAL LAGRANGE.—We here complete our report (*cf.* JOURNAL, VI, p. 390) of the study made by M. Eug. Müntz in the *Ami des Mon.* (1890, pp. 91–5 and 131; 1891, No. 1) on the monument of Card. Lagrange. The relief belongs to the naturalistic French revival of the close of the XIV and the first part of the XV century. It and the statues surrounding it are in the style of the strongest works from the workshop of André Beauneveu, the famous *imagier* of Charles V. Another mausoleum to the Cardinal was ordered for Amiens. Its effigy still remains, now placed behind the high altar of the Cathedral. Finally another statue of the Cardinal is placed on one of the buttresses added under Charles V to the north side of the facade near that of Bureau de la Rivière. It is a work in every way worthy of the chisel of Beauneveu and quite comparable to the "Transi" of Avignon.

EARLY PRINTING AT AVIGNON: IMPORTANT DISCOVERY.—A small pamphlet lately published by the Abbé Requin ('L'Imprimerie à Avignon en 1444,' Paris, Picard, 8vo., pp. 20) contains an account of some interesting and important documents discovered by him in the course of his inquiries about the early painters of Avignon. These documents are preserved among the acts of three notaries who practised at Avignon in the middle of the fifteenth century, and are printed at the end of the pamphlet. A photo-gravure of one of them is given as a frontispiece. The story which they disclose is briefly as follows. In 1444 one Procopius Valdfoghel (Waldvogel), a goldsmith of Prague, was living at Avignon: he there instructed two students, Manaud Vitalis and his friend Arnaud de Coselhac, in the art of artificial writing (*scribendi artificialiter*), and furnished them with the instruments of the art, consisting of two abecedaria of metal and two iron *formæ*, a steel screw, forty-eight *formæ* of tin, and other implements. About the same time Valdfoghel instructed one Davin of Caderousse, a Jew, in the same art; and two years later, on the 10th of March, 1446,

he entered into an agreement with the Jew to supply him with twenty-seven Hebrew letters cut in iron (*scisas in ferro*) and other implements for the practice of the art. At the same time the Jew agreed not to disclose the art, either in theory or practice, to any one as long as Valdfoghel remained at Avignon or in the neighborhood. Meanwhile Valdfoghel appears to have entered into partnership with Manaud Vitalis and Arnaud de Coselhac, and in April, 1446, this partnership was dissolved so far as Vitalis was concerned, and Vitalis gave up to his partners all his share in the instruments of the art, whether of iron, steel, copper, lead, and other metals, or of wood. Upon his doing this, Vitalis, at the request of Valdfoghel, made oath upon the Holy Gospels that the art of artificial writing taught him by Valdfoghel was a true art, and easy and useful to any one who desired to work at it and was fond of it. The Abbé suggests that possibly Valdfoghel was afraid of being punished by the Inquisition as a sorcerer, and it may be remembered that Gutenberg was afraid that people might think his art was jugglery (*göckelwerck*); but it seems more likely that Valdfoghel feared that it might get about that Vitalis was leaving him because he found the invention was a failure, and that to prevent this opinion he asked for the declaration.

The great importance of the discovery of these documents will be manifest when it is considered that it was in 1439—only five years before we find Valdfoghel at Avignon—that Gutenberg was experimenting at Strasburg, and that Valdfoghel was actually practising and teaching his art of artificial writing at Avignon before Gutenberg removed to Mainz. If, therefore, Valdfoghel's artificial writing was in fact printing with movable types, Avignon, instead of Mainz as hitherto supposed, becomes the second city where printing was carried on. That the artificial writing practised by Valdfoghel was printing seems to be clearly shown by the documents. They mention letters cut in iron, abecedaria, or alphabets of metal, types (*formæ*), and metal screws, the use of which cannot be explained otherwise than on the supposition that Valdfoghel was in truth printing by means of movable letters. How had he learnt the art? How long did he continue to practise it at Avignon or elsewhere? The Abbé Requin has not been able to find any answer to these questions. It is possible that Valdfoghel learned the secret either from Gutenberg himself or from one of his servants or workpeople, but we have no certain knowledge. I hope that in his future researches the Abbé may discover some further information about this early printer, and even some specimen of his work. Meanwhile we owe to him the most important discovery in the annals of typography since the finding in 1745 of the record of Gutenberg's lawsuit with the representatives of Andreas Dritzchen.—J. SHELLY, in *Athenæum*, Aug. 30.

BASSOUES.—DONJON.—The donjon of Bassoues (arrond. Mirande, dep. Gers) is classed as an historical monument. Drawings and a description of it are for the first time published in *L'Ami des Monuments*, 1891, pp. 8-13, by MM. Lauzun and Benouville. It is a square tower, reinforced by four immense angular buttresses and containing four stories each consisting of a fine hall covered with a ribbed cross vault and lighted by trefoil windows. The summit is crowned by an octagonal construction. It formed part of a castle which belonged to the archbishops of Auch. It was built in 1368 by Archb. Arnaud d'Aubert, Seigneur of Bassoues. It remains in a perfect state of preservation.

BERNAY.—DECORATION OF THE ABBEY.—Mr. J. P. Harrison communicated a note on churches built by Richard II, Duke of Normandy, and also exhibited photographs of capitals in the south aisle of the choir of Bernay Abbey, founded *circa* 1017. Mr. Harrison considered that the ornamentation of the capitals was of a decidedly Eastern type and exhibited features derived from the foliage of the palm tree. As the chronicles of Verdun Abbey record a visit to Richard by Simon, Abbot of Mount Sinai, with some of his monks, about the time that the work at Bernay was in progress, the sculpture of the capitals may perhaps be attributed to their skill. It appears also that Simon and one of the monks named Stephen remained at Rouen for two years, and whilst there Simon suggested the foundation of a monastery in the suburbs, and deposited in it relics of St. Catherine which he had brought with him from the East. The church is no longer in existence, but a capital belonging to it, Oriental in character, is preserved in the Rouen Museum. Work similar to that at Bernay exists at Evreux. Fecamp Abbey contains little more than a single bay of Duke Richard's work. Here the ornament is altogether different from that at Bernay, and resembles some in the choir of Oxford Cathedral and the illuminated MSS. of the period.—*Athenæum*, Nov. 15.

BESANÇON.—PAINTINGS OF THE WILLEMOT COLLECTION.—Among the works of art left to the city of Besançon by M. Willemot are the following paintings of the early Italian schools. (1) A small triptych by Giotto, with the Crucifixion, Annunciation, and two saints. (2) Two sides of another triptych by the same master; on one is the Crucifixion, on the other several saints. (3) A predella of the early Siennese school: in the central compartment is Christ, in two others are busts of the Virgin and St. John. (4) A fine altar-piece of the middle of the xv century representing the mounting of Calvary, with a procession in rich Byzantine costumes. On the sides and in a predella are sixteen small compositions from the lives of Christ and the Virgin. It is attributed either to Pisanello or Pesellino.—A. CASTAN, in *Cour. de l'Art*, 1890, No. 30.

BLAIN (Loire-Inf.).—**TOMBS OF THE ROHAN**.—In demolishing the old church at Blain a crypt was found in which were four leaden cases,—two large and two small—, which are supposed to have contained the remains of René II, of Catherine de Parthenay his widow and of their two children, and two vases, also of lead, bearing the dates 1575 and 1586 which must have contained, one the entrails of Henri I, vicomte de Rohan, who died in 1575, the other the heart of René II de Rohan, who died at La Rochelle in 1586.—*Chron. des Arts*, 1891, No. 6.

BOUILLAND (Côte-d'Or).—**MEROVINGIAN ANTIQUITIES**.—A collective burial place of the Merovingian period has been discovered at Bouilland. Several tombs have been cleared and were found to contain, besides well-preserved skeletons, several vases and medals, as well as belt plaques with traces of silver damasquinery. The deceased were buried in sarcophagi made of local lava.—*Chron. des Arts*, 1891, No. 12.

BOURGES.—Excavations for a bridge over the Auron have led to the discovery on a line parallel to the river of a row of monoliths and steles some of which carved, and behind them a mass of earth containing a mixture of Roman tiles, pottery, *etc.* In the same region there were found a hand mill and some perfectly-preserved mill-stones. The Auron having, at an early period, been turned from its normal course it is supposed that the line of steles was established as a barrier.—*Ami des Mon.*, 1890, p. 317.

CAHORS.—*Discovery of paintings in the Cathedral*.—In restoring the domes of the cathedral of Cahors some remarkable mediæval frescoes were uncovered in the western dome, eight metres in height and surrounded by rich borders. M. Corroger describes them in the *Ami des Monuments*, 1891, p. 3: "The decoration of the western dome remains complete in its composition, for though the coloring has somewhat faded the outline traced in black with remarkable science, vigor and sureness of hand, remains complete or nearly so. The western dome, sixteen feet in diameter, like the eastern, is divided into eight segments separated by bands formed by arabesques of flowers or fruits vigorously drawn. The figures of eight prophets form the centre of each segment: the four great and four of the twelve minor prophets are placed each within an architectural motif of the close of the XIII cent.; his outline traced boldly on a ground of masoury whose courses are indicated by a double brown line on a ground of light ocre, each prophet holds an unrolled scroll with a name in fine letters of the XIII cent. The bands (or segments) centre in a frieze surrounding the summit of the dome, forming a starry heaven, in the midst of which is represented the apotheosis of St. Stephen, the patron of the parish church. The frieze is composed of twenty-two figures of life size, representing in varied and lively attitudes the scenes of the stoning of the saint."

Historical evidence shows that these paintings were executed either in 1275 by care of bishop Raymond de Cornil, or in 1300 by bishop Raymond de Gauchelle. As a decoration it is unique in France as representing the best style of the XIII century.

In the eastern cupola and on the pendentives there were traces of paintings under the whitewash which could not be preserved or even copied on account of their dilapidation.

MARTRES-TOLOSANES.—ROMAN SCULPTURES.—Prof. Lebèque, the distinguished epigraphist of Toulouse, has been enabled, by the help of a Government grant of 3000 francs to undertake excavations at Martres-Tolosanes, a small town s. w. of Toulouse. Ninety-six pieces of sculpture were discovered scattered closely at a depth of three or four metres: among them were eight heads of marble, the bust of an emperor, several basreliefs, a statue of Minerva, some fragments of male statues, capitals, pottery, marble bases for busts, etc.

The Minister of Public Instruction charged MM. Perrot and Robert de Lasteyrie to study the results of these excavations, and M. Perrot reported the results of his observations to the *Acad. des Inscriptions* (March 6, 13). In the first place he showed that before the present discoveries numerous finds had been made on the same site not only in the XVII and XVIII centuries but later. Some very fruitful excavations were carried on at the expense of the department of Haute-Garonne between 1826 and 1830 and between 1840 and 1842 when a large series of varied monuments came to light, now placed in the museum of Toulouse among which are a statue of Augustus and the well-known Venus de Martres.

According to M. Perrot the entire series of monuments from these various excavations should be classified in three distinct groups. The first group includes replicas of ideal types created by Greek sculpture, figures of divinities and heroes. The beautiful head known as the *Venus de Martres* recalls the Cnidian Aphrodite of Praxiteles; there is also an Ariadne in marble of two colors, not without charm. To the same series belong the fragments of a frieze in high relief representing the labors of Hercules which reflects the style in vogue at the beginning of the second century B. C. through the influence of the Rhodian school. There is the same seeking after effect, the same muscular exaggeration, but less artistic skill than in the great altar of Pergamon.

The second group consists of busts of Roman emperors and of princes and princesses of the imperial family. There is a remarkable head of Augustus. None of the three busts of Trajan are of first rank: after the second century everything is of little value or is bad art.

The third group consists of heads in which it is impossible to recognize Roman busts, though they appear to have the characteristics of portraits.

As works of art they are extremely mediocre. They are like photographs of Gallo-Roman men and women of the first two centuries of our era: in their back is the hole by which they were clamped to the wall.

After examining also the collection in the museum of Toulouse, M. Perrot studies the question of origin. It had previously been thought that the best of these pieces were imported into Aquitaine. It was even said that they were of Greek or Italian marbles. Skilled experts have, however, shown that all the monuments are, without exception, executed in marble of the Pyrenees or of the locality, leading one to suppose that they are the product of an entirely local school of art which flourished vigorously during the first centuries of our era. Some sculptures at the museum of Toulouse which were brought from Béziers and Narbonne have the same origin. The *ateliers* which supplied the cities of the Narbonnaise and Aquitaine must have been founded in the first century by artists coming from Greece, or rather from Italy, who brought with them fine models; but the *personnel* employed in these *ateliers* was afterwards recruited from among the natives, and there being no longer *chefs-d'œuvre* to imitate, a decadence ensued which became at the close of the first century far more rapid than in Italy: after the Antonines it is so rapid as to end in barbarism. M. Perrot called attention to the remarkable fact that all the marbles found bear traces of violent and wilful destruction. He refutes the theory of a destruction by flood, which would not have gathered them together but have dispersed them. Many of the heads bear the marks of the blows which have split them vertically, sometimes detaching the occiput: such blows could have been made only by an instrument like an ax or a pick. It is evident that these marbles were brought here and piled up after being broken to pieces. This was done either by a riot of Christians or an invasion of barbarians. Dismissing the idea of a local sculptural atelier, M. Perrot believed that there was here a town of considerable importance containing a temple consecrated to Hercules, whose image is reproduced under every possible form, and also a rich villa full of works of art, probably the property of some great senatorial family. All these buildings were doubtless sacked in the fourth century by the Christians or pillaged by the barbarians.—*Chron. des Arts*, 1891, Nos. 1, 12; *Ami des Mon.*, 1891, pp. 108–9.

MAS D'AZIL.—In *L'Anthropologie* for April M. Émile Cartailhac gives an account of the researches, pursued by M. Ed. Piette since 1887, and still going on, in the cavern of Mas d'Azil (Ariège). Among the objects discovered the most remarkable are a number of pebbles painted with designs in a red coloring matter. The design usually comprises a thin border round the circumference of the pebble, and within bars and circular and heart-shaped objects. Others, without the border, have zigzags, Θ,

crosses, and other designs. Harpoons of staghorn were also found. Though M. Piette alone had authority to explore the cavern, some persons in his absence intruded into it, and among the remains disturbed by them were afterwards found portions of a skeleton bearing traces of red paint.—*Athenæum*, May 30.

MAVILLY (Côte-d'Or).—M. Reinach read to the *Acad. des Inscriptions* a paper on the altar of Mavilly discovered during the last century. It is in the form of two superposed cubes whose sides are covered with reliefs that have never been satisfactorily explained. The writer shows that the figures represented are simply the twelve great gods of the Roman pantheon plus the serpent with ram's head. The figure which he identifies with Apollo is that of a child, which is in harmony with the peculiarly Celtic conception of him as the *Bonus puer*. M. Reinach's conclusions are stated at length in an article in the *Revue archéologique*.

MUREAUX.—**PREHISTORIC DISCOVERIES**.—Dr. Verneau has directed some excavations in the commune of Mureaux near Meulan (Seine-et-Oise). He unearthed a covered alley, which included a sepulchral chamber and a vestibule, and contained numerous crouching skeletons accompanied by objects in bone, silex, etc. The children were buried separately against one of the walls of the monument. The materials employed are gigantic: the sepulchral chamber is 9 met. long, 1.60 to 2.10 wide, and 1.55 to 1.60 high. The entrance to the gallery was partly demolished at the time of the construction of a Roman road which passed immediately over the vestibule, thus demonstrating the greater antiquity of the monument. Near it were found several Roman antiquities, notably a small square building covered with paintings.—*Revue Crit.*, 1890, II, p. 212.

NOIRON-LEZ-CITEAUX.—**A MEROVINGIAN CEMETERY**.—Léon Bidault communicated to the *Acad. des Inscr.* (Nov. 21), through Alex. Bertrand, his discoveries in a Merovingian cemetery near Dijon, at Noiron-lez-Citeaux. For details, see *Revue Crit.*, 1890, II, p. 407.

PARIS.—**THE PRESERVATION OF MONUMENTS**.—At one of the meetings of the *Comité des monuments parisiens* it was announced that the superb *Hotel des Prévôts de Paris*, a unique example of the constructions of the XVI century was about to be demolished. A protest was made. M. Charles Normand suggested that careful study should be made of the openings projected by the plans of the city. From them it is possible to know many years in advance what buildings are menaced and to offer suggestions by which the plans may be modified before it is too late. M. Hoffman has undertaken to draw up the plans of all the buildings that may be demolished.—*Chron. des Arts*, 1891, No. 5.

DONJON OF JEAN-SANS-PEUR.—The French Society for the Protection of Ancient Buildings had need bestir itself in defence of that most interesting

relic, the donjon of Jean-sans-Peur, in the Rue Étienne Marcel, Paris, which is reported to be in a ruinous state.—*Athenæum*, Jan. 17.

Baron de Ménascé's Egyptian collection.—On Feb. 23 and 24 took place the sale of the collection of Egyptian antiquities of the baron de Ménascé. The museum of Copenhagen was the principal buyer, next the Louvre and the museum of Berlin. The collection comprised a number of statues and figures of calcareous stone basalt, granite, marble and hematite, some fine gold jewelry, statues in silver of Nofre-Toum, a large number of good bronzes and some figures in wood.—*Chron. des Arts*, 1891, No. 10.

Episcopal vestments of St. Thomas de Canteloup.—At a recent meeting of the Académie des Inscriptions, M. de Mély read a paper upon certain episcopal vestments, which are preserved at Lisieux, and are there ascribed to Thomas à Becket. On a close examination of them, M. de Mély ascertained that both the form and the material belong rather to the thirteenth than the twelfth century, and also that they are emblazoned with armorial bearings, a kind of ornamentation not in use in the time of Becket. A medieval parchment kept with them contains only the words *St. Thomas de C.* Now there was in the thirteenth century another English prelate, with the same Christian name as Becket, who likewise obtained the honor of canonization. This was St. Thomas de Canteloup or Cantilupe, Bishop of Hereford (1275–1282), and for a short time chancellor under Henry III. He belonged to the family of Gournay, and was allied to that of Bockenham; and it appears that the armorial bearings on the vestments are precisely those which English heralds assign to these two families.—*Academy*, March 28.

CLUNY MUSEUM.—RECENT DONATIONS.—M. Mannheim has presented an important panel of carved wood of the xv cent. of Spanish style, and a group in wood, painted and gilt, dating from the xiii cent. representing the Virgin and Child. Mme. Leon has offered a collection of French bronze weights of the xiii to the xvii centuries on which are emblems, arms or monograms of a large number of French cities. From M. Haas-Lan a reliquary of the xv cent. Among other gifts are: a chalice with a partially gilt silver paten of the xv cent.; two censers, one of Limoges, xiii cent., in *champleve* enamel, and the other, without cover, a Greek bronze of the xii cent.; finally a Virgin in bronze of the xii cent. The museum has received a death head, a delicate work in ivory, a low cup of Muraus glass, xv cent., etc.—*Ami des Mon.*, 1890, pp. 325–6.

The sculptor Antokolsky has given a statue of fine Portland stone representing St. Denis carrying his head, an extremely refined work of the Parisian school of the close of the xiv or the beginning of the xv century. M. Ed. Bonaffé has presented a charming figure of a young shepherd in

painted stone, a French work of the XVI century.—*Chron. des Arts*, 1891, No. 11.

On the death of Isaac Strauss all his collections of works of art were sold, with the exception of his Hebrew collection. Baroness Nathaniel de Rothschild purchased the latter and made a gift of it to the Cluny Museum.

GUIMET MUSEUM.—M. Aymonier has brought to the Musée Guimet from Cambodia some steles and statues; M. Guimet some specimens of Chinese ceramics and a jade sceptre; M. Tornii has given a satsuma vase and M. Boulloche some wooden statues of divinities from Tonquin.

MUSÉE DES ARTS DÉCORATIFS.—This museum has purchased a large number of objects in copper and bronze: a cup from Padua; Persian basins with chandeliers and boxes, Venetian knocker, Arabic chandeliers and box. Also a number of pieces of faïence and porcelain: some Persian (a box and a plate), others Italian either of Robbia ware (a vase), or from the environs of Florence (a plate with mask of the Medici) or from Venice (a ewer and cups); other pieces are in faïence of Marseilles or Rouen, or from China and Japan.

THE LIBRARY OF THE UNION CENTRALE DES ARTS DÉCORATIFS.—The main object of the great association called the *Union Centrale des Arts Décoratifs* is to do for France a work similar to that done in England by the association which organized the South Kensington Museum. It has not yet succeeded in establishing its great (in project) artistic and industrial museum, but it facilitates for students and especially for artists and artisans the study of models and reproductions of the works of art of former periods by means of the large collections in its library. A few words will give an idea of one of its collections—its encyclopædic collection of engravings and graphic documents. Begun about three years ago, this undertaking is now completed in its main division and is sufficient for all practical purposes. It consists of about five hundred large portfolios in which are classified chronologically documents relating to the history and development of art and especially of decorative composition. The general system of classification adopted has placed first the works of architecture, followed by sculpture and painting in all their subdivisions of periods and uses. Then come the external and internal decoration, sculptured or painted, of buildings, all the details of the furnishing and productions of art in wood, iron, metal and other primary substances concurring in the decoration of the house; then come the personal needs of man; his garments and their variations, his means of defense and offence, the art of weaving and all the implements and utensils necessary to him, and finally the resources placed at his disposal, to be transformed by art, by the flora, fauna and other natural products.—A. C. in *Chron. des Arts*, 1891, No. 4.

LOUVRE.—RECENT CHANGES AND ACQUISITIONS.—*Opening of the third Persian room.*—The third and last room of the Susa Gallery at the Louvre will be opened to the public at Easter. It will contain portions of a frieze of animals discovered by M. Dieulafoy in the ruins of the Apadana, which from their position had evidently been built in the walls of a later building. The basrelief is unglazed, and from indications on the surface was probably painted. The execution and modelling are most masterly. The frieze may date from the period of Darius I. The room will contain other interesting relics of the Achæmenian epoch, and a small collection of fragments of pottery of the Mohammedan era. One or two pieces are similar in style to the pottery found at Braminmabad, now in the British Museum, which is anterior to the eleventh century A. D. A carefully executed model of the Apadana will occupy the centre of the room. This valuable attempt at restoration of a celebrated historical monument implies a rare union of artistic talent and the capacity for archæological research seldom found in combination. The reproduction of the frieze of the Archers of the Guard, presented by the Louvre to South Kensington Museum, will be sent to London next week. The text of the remaining volumes of M. Dieulafoy's *Les Fouilles de Suse* is nearly completed, and awaits only the production of the chromo-lithographs which will illustrate the work—*Athenæum*, March 28.

New arrangement.—Attention was called lately to a new departure in classification and arrangement according to groups and materials inaugurated in the Louvre by the installation in one hall of the large collection of ivories which had previously been scattered through many halls. The Conservateur of the department of the Middle Ages and Renaissance has continued this work by uniting in the former hall of the *Musée des Souverains* the greater part of the works in metal belonging to the Museum. It is a superb collection and the objects show to far better advantage. The Davillier and Gatteaux collections, and many pieces recently acquired but never exhibited, are included. M. Gonze, who writes in the *Chron. des Arts* (1891, No. 1), counsels some exchanges to fill up lacunæ.

The *Bulletin des Musées* announces that the *Direction des Musées Nationaux* has decided that notices, containing a brief description of each hall and information regarding its decoration, should be posted in all the halls of the Louvre for the instruction of the public.

Oriental Antiquities and ancient ceramics.—The following pieces in this department were purchased at the Piot sale. I. A Phœnician king in bronze and a fragment of Babylonian enamelled brick. II. A series of antiquities of Cyprus and Rhodes: some female heads in Cypriote calcareous stone, six horsemen, a warrior and the upper part of another, a crowned female and a rough model of a man with tiara, all Cypriote terracottas of archaic style. Some Cypriote pottery: aryballoi with straight neck, in the

form of a head of Herakles, oinochoë with trilobe mouth : a three-foot *lebes*, a large alabastron in the form of a draped Aphrodite and an Aphrodite in the form of a round sheath. Finally some figurines of the finest Greek style from the Cypriote factory of Larnaka : a bust of Demeter, a veiled woman, a draped woman, also torsi of seated Aphrodite, draped goddess, the head of a grinning Silenus. III. Antiquities of Asia Minor, of Hellenistic style, factory of Smyrna : a head of Herakles with traces of gilding, head of an ephebe, a beardless head like that of Alexander the Great, the head of a comic actor, the mould of a group : Silenus with a goat. IV. Antiquities of Greece and the Islands, terracotta plaques of archaic style supposed to come from Milo ; the subjects are : Bellerophon upon Pegasos : a female sphinx whose head is covered with the polos : No. 41. End of a Greek mirror : figure of a winged Nikê, in the Athenian peplos of the fifth cent., running to the left : found at Athens. Skylla, turned to the right, right hand on hip, left at chin : she has a nude human waist, below which are two fins ending in dog's heads, while the figure ends in a large curling fish's tail : a female sphinx, seated between the volutes of a capital with wings spread. A fragment of a painted plaquette with parts of a horseman and a quadruped, archaic black figures found in 1852 on the Akropolis at Athens. A Boiotian figurine, probably from Tanagra, representing a horseman, of primitive style, decorated with black geometric designs. A Hermes Kriophoros, an archaic Boiotian figurine, probably from Thespiæ. A vase found at Corinth, in the shape of a crouching man, of early Egyptianizing style, draped in a costume of white and black checks. A small Attic lekythos with gilt ornaments, and red figures touched up with white, representing Aphrodite and Eros by the sea. V. Italian antiquities are represented merely by a rectangular plate in the Italiote style of the fourth (third ?) century, from the Basilicata, on which is a frame of painted fishes and shells with red figures touched up with white and yellow.—*Ami des Mon.*, 1890, p. 324.

Among the most recent acquisitions of the Oriental department is a bas-relief belonging to the so-called Hittite art. This bas-relief represents a deer hunt : the hunter on his chariot, driven by a retainer is discharging an arrow at the deer who leaps before the horses. Inscriptions in relief surrounded this scene.—*Chron. des Arts*, 1891, No. 13.

Hall XII of *Greek sculpture* has been reopened after numerous changes. The Hera of Samos is in the centre : the three metopes from Olympia are placed below the Parthenon relief, and opposite are the fragments of steles and funerary monuments.

The Marchant Collection.—This collection, offered to the Louvre by its owner, includes 52 Punic *stelai*, 30 Greek and Latin inscriptions, 150 Roman lamps, medals, fragments of statues and some 15 heads of divini-

ties and emperors. It was formed while Commander Marchant belonged to the army of Africa, and is composed of objects found at Carthage. Among the heads is a magnificent one of Jupiter Serapis, a laureated head of Hadrian, and another of an empress in admirable preservation.

M. Renan, editor of the *Corpus inscriptionum semiticarum*, has communicated to the *Acad. des inscriptions* the impressions of the *stelai*, and has called attention to some that have extremely rare subjects, especially three which represent, (1) a funerary banquet, (2) a sacrifice, (3) a hare or rabbit.—*Cour. de l'Art*, 1890, Nos. 27, 32, 34.

Christian antiquities.—Some new objects have been exhibited in the newly opened hall. They are terracotta tiles from Kasrine (Tunisia), a cartel with dove-tails containing a discourse mentioning the sacred precincts of the virgins, and a window from the tomb of a martyr, a double arcade allowing the faithful to approach the sarcophagus. An inscription (*memoria*) mentions relics and is the earliest record of the habit of collecting and transporting them. It comes from a ruin situated between Tixter and Ras-el-oned. Some bricks with figures in relief and Greek inscriptions come from Kilikia and Constantinople; and finally a Byzantine capital discovered at Bogdan-Serai in the latter city.—*Ami des Mon.*, 1890, p. 323.

Middle Ages and Renaissance.—*Harbaville ivory triptych*.—The most important work of mediæval art recently acquired is the magnificent Byzantine ivory retable or triptych of the Harbaville collection, made known by M. de Linas's study of it in the *Revue de l'Art Chrétien* for 1887. It is the most wonderful work of Byzantine ivory carving of the mediæval period, on account of the beauty of its types and style, the delicacy of its execution and its perfect preservation. It is a work of the XIIIth century.

Reliquary of Medina del Campo.—Mme. Spitzer has offered, in memory of her husband, a piece of great artistic importance, a reliquary dating from the first half of the XV cent., of almost the same date and of nearly the same style as the famous Virgin of Jeanne d'Evreux. It is an arm-reliquary in rock crystal and silver gilt and enamelled, measuring 60 cent. in height and coming from the convent of the Dominicanas Reales of Medina del Campo in Spain. The style is of great delicacy and similar to that of the best contemporary French works. The foot is decorated with enamelled arms and friezes; the crystal cylinder is flanked with four elegant buttresses: the top is occupied by a charming enamelled arm bearing a dedicatory inscription. It contains a relic of St. Louis, bishop of Toulouse, son of Charles of Anjou. It is mentioned in the *Hist. Gen. de Saint Dominique* by Juan Lopez: the convent for which it was executed was founded in 1418 by Queen Leonora. It had not yet been arranged in Mr. Spitzer's collection at the time of his death.—*Chron. des Arts*, 1891, No. 4.

Renaissance Sculptures.—The continued demands of the *Société des Antiquaires* for the restoration of the monuments removed after 1816 from the old *Musée des Monuments Français* have begun to produce an effect. The terracotta figure of the Virgin by Germain Pilon, formerly at the Sainte Chapelle, long at St. Cloud, has been returned to the Louvre, as well as the Virgin in marble that formerly decorated the chapel of the Château of Ecouen, and after the Restoration the sacristy of Notre Dame in Versailles.—*Revue Crit.*, 1890, I, p. 480.

Miscellaneous additions are: A medallion of Robinet (1521) representing Marin Le Pigny. Two bronzes of the xv cent. attributed to Ulocrine—a nymph and satyr, and another mythological subject. A painted Venetian enamel plaque of the close of the xv cent.

Sword of Francesco Gonzaga.—An addition to the Renaissance department of the Louvre is a beautiful short sword or *cinquedea*, also called *langue de bœuf*, which figured at the exhibition of Tours. It is a fine work of the close of the xv cent., and undoubtedly by the hand of the same famous artist, named *Ercole*, by whom is the sword of Cæsar Borgia owned by the Duke of Sermoneta. The devices and arms show that this sword belonged to the celebrated marquis of Mantova Francesco di Gonzaga.—*Cour. de l'Art*, 1890, No. 32.

M. Piot's gift.—The objects presented by M. Piot (see vol. VI, p. 244) were placed on exhibition in August. They are the following: I. RAPHAEL SANZIO. *Head of St. Elisabeth.* Study in tempera on cloth for the painting of the *Visitation* now in the Museum of Madrid; it measures 34 by 24 cent. II. *Portrait of Michelangelo Buonarroti:* bronze bust of the xvi cent. of the Florentine school, from the Bianchetti collection of Bologna. The expression is powerful and melancholy and the font of extreme delicacy. It has been suggested that its author was Antonio del Franceze. III. Terracotta medallion of the Virgin adoring the infant Christ: a work of the Florentine school of the xv cent. attributed by M. Piot to Donatello. The Virgin is a half-figure, nearly in profile. IV. Three basreliefs of painted and gilt wood of the Milanese school of the close of the xv cent. They represent (1) Joachim expelled from the temple, (2) the Nativity of the Virgin, (3) the meeting of Joachim and Anna. V. Wooden figure of St. Christopher, painted and gilt: Italian art of the middle of the xv cent. VI–VIII. Three superb rectangular inlaid wooden panels of North Italian art of the xv cent., with decoration in relief, from the choir of a church. They were purchased at Padova, and bear a note on the back giving the name of their artist, Fra Vincenzo, as follows: *Il bel gallo con gli altri due quadri lavorati di tarsi adornavano il sedile a destra della cappella maggiore della soppressa chiesa di S. Benedetto novello, e sono lavoro di Fra Vincenzo dalle Vacche Veronese, monaco Olivetano ricordato dal Brandolese nella sua de-*

scrizione delle pitture di Padova, ivi 1795, in 8o., p. 166.—Cour. de l'Art, 1890, No. 34.

M. Rattier's gift.—M. Rattier (d. June 9, 1890) left the following pieces to the Louvre, which have been accepted: a painting of the Virgin by Quentin Matsys, and a fine Renaissance medal with an admirable relief of a helmeted Scipio, attributed by Bode to Leonardo.—*Chron. des Arts, 1891, No. 5.*

French school of Painting.—M. J. Maciet has given two interesting examples of early French painting of which so few specimens exist in the Louvre. One is a large Calvary painted on wood and dating from the first years of the xv cent. It is closely related to the panel of the Martyrdom of St. Denis already in the Museum and is full of a vigorous originality. The second panel represents one of the allegories familiar to the school of Fontainebleau, the greater part of whose authentic works have disappeared.—*Chron. des Arts, 1891, No. 9.*

NATIONAL LIBRARY.—A silver dish.—At the Piot sale the Bibliothèque Nationale secured a large silver plate or *missorium* decorated with a leaf border and a basrelief of Herakles strangling the Nemean lion. It belongs to the early part of the fifth cent. A. D., and was illustrated in *Gazette Arch.*, 1886, pl. 21.

A Manchû manuscript.—The *Berliner Tageblatt* announces a recent discovery by Prof. Pozdneef, of St. Petersburg, at the National Library of Paris. This is a Manchû manuscript which may prove of the greatest interest to Orientalists, and which he declares to be of more ancient date than the recently discovered inscription at Corea. The manuscript, which numbers 161 leaves, made of Chinese paper, all fully covered with writing, is said to have been acquired by the great French library, in some unknown way, towards the end of the last century.—*Athenæum, Aug. 30.*

TROCADERO MUSEUM.—New gallery of casts.—The new gallery in the Musée du Trocadéro, which has been for some time in course of arrangement, is open to the public. The casts from the antique lately in this museum are to be placed in one of the galleries of the Louvre, which was till now occupied by the Préfecture de la Seine.—*Athenæum, Dec. 6.*

PAU.—AN EXHIBITION.—In April there was to be opened in Pau a retrospective exhibition which would include not only the works of art scattered through the Basses-Pyrénées, but those also of the Landes, Gers and Hautes-Pyrénées.—*Chron. des Arts, 1891, No. 2.*

PUPILLIN.—A ROMAN VILLA.—The Abbé Guichard, curate of Pupillin, has uncovered at this locality a richly decorated country villa, and has found in it many Roman antiquities. The villa dates from the beginning of Roman rule, was burned and then rebuilt, was destroyed at the period of the invasions, rebuilt a third time and again burned. A bronze statuette

of good workmanship represents the god with the hammer, a type quite frequent in the Franche-Comté.—*Rev. Arch.*, 1891, 1, p. 121.

RHEIMS.—A GRÆCO-GALLIC MOSAIC.—In what used to be the suburb of the Gallo-Roman city of Rheims a remarkably fine mosaic, measuring five metres square, has been found, injured, however, by a clandestine burial. Beside the beauty of its composition, and the purity of design of its torsades and rosettes, its central picture is of especial interest. It represents two nude athletes, finely drawn, fighting with short swords. The energetic action is made the more accurate by the minute size of the cubes that form out the muscles, some of them in the legs being only 3 or 4 millimetres wide. This fineness of workmanship in the figures and that of several delicate flowers copied from the flora of the South, seem to indicate a Greek origin: its date is probably the first century. The mosaics are of colored terracottas.—*Ami des Mon.*, 1891, No. 24, p. 83.

RENAISSANCE TAPESTRIES.—The most important series of tapestries in the Cathedral of Rheims, the gift of the Cardinal de Lorraine, dating from late in the sixteenth century, and representing incidents in the life of the Virgin, are now being repaired and cleaned. It is not too soon these tasks are undertaken. The noble work on these and other tapestries in the same church, which we reviewed a few years ago, gives a complete account of them.—*Athenæum*, Oct. 4.

RENNES.—ROMAN INSCRIPTIONS.—In demolishing the ancient city-walls, the discovery was made of twelve Roman inscriptions, some of which are of especial interest as they are milestones with the names of Septimius Severus, Victorinus and Tetricus.—*Revue Crit.*, 1890, 1, pp. 400, 440.

SAINT-MARCEL.—A GALLIC MONEY-BOX.—Near Argenton (commune of St. Marcel, department Indre) a countryman came across a piece of iron ore which on being broken was found to contain 251 silver coins. The ore was hollow and its aperture had been closed with cement. The 251 coins, in perfect preservation, are of the Gallic period, previous to the Roman invasion: they were coined by chiefs of the Bituriges and are of six or eight different types. This was evidently an early Gallic money-box with its contents.—*Ami des Mon.*, 1891, pp. 23-24.

SAINT-SERVAN (Ille-et-Vilaine).—THE EARLY CATHEDRAL.—The Abbé Duchesne undertook in September some excavations at Saint-Servan on the site of the ancient cathedral of Alet. He was able to reconstruct the plan of the building, which according to local traditions was built shortly before or after 1000 A. D. The details of the architecture confirm this early date by their extreme simplicity, not to say poverty. A peculiarity is the double semicircular apse, one at each end.—*Revue Crit.*, 1890, II, p. 296.

SUIPPES.—GALLO-ROMAN HOUSE.—In exploring to the N. W. of Suippes in a place where some Merovingian tombs had been found, M. Counhaye came upon the substructures of a Gallo-Roman house whose destruction appears to date from the barbaric invasions. There were black and white mosaic floors; the walls were painted red, yellow, blue and green with elegant borders; and one room at least was decorated with genre paintings, of which the figure of a bacchante was preserved. Two rings and a fibula were all the objects found.—*Bull. Soc. des Antiquaires*, 1890, p. 146.

TOURS.—CHURCH OF ST. MARTIN.—At a meeting of the *Acad. des Inscriptions* (Feb. 6) M. de Lasteyrie described the remains of the basilica of St. Martin of Tours, found during recent excavations. He showed that those who attributed them to the church built in the fifth century by Perpetuus and described by Gregory of Tours, founded themselves on a mistaken restoration of Quicherat. The ruins found in 1886 are not earlier than the Carolingian period, and the primitive church was a basilica like those of Rome and Ravenna. The assumed deambulatory around the apse is an untenable hypothesis of M. Quicherat.—*Ami des Mon.*, 1891, p. 60.

TRÔO (near).—PAINTINGS AT ST. JACQUES.—Some curious wall paintings have been uncovered from whitewash on the walls of the church of Saint Jacques des Guérets near Trôo (Loir-et-Cher). The compositions are of large dimensions: among them are five knights separated by fantastic plants, scenes of heaven and hell, the martyrdom of the apostle St. James the Less, the resurrection of Lazarus, St. Peter and a legend of Saint Nicholas.—*Ami des Mon.*, 1891, p. 52.

BELGIUM.

ANTWERP.—INTERNATIONAL MÆDIEVAL MINIATURES.—M. Courajod made an interesting communication to the *Acad. des Inscriptions* (May 14) regarding an illuminated manuscript in the Plantian Museum at Antwerp which gives new proof of the co-existence in the studios, at the end of the XIV century, of squads of artists of different nationalities. In this manuscript there are illuminations by the German, Franco-Flemish and Italian schools. It was never finished: several sheets bear only un-gouached sketches which show clearly the delicacy and grace of Gothic design.—*Revue Crit.*, 1891, I, p. 440.

N. B.—For lack of space the rest of the News is reserved for the next number.

A. L. FROTHINGHAM, JR.

CORRESPONDENCE.

PROFESSORS MOORE AND FROTHINGHAM ON "GOTHIC ARCHITECTURE."

N. B.—The editors hereby declare the discussion closed, in so far as the JOURNAL is concerned.

To the Managing Editor of the American Journal of Archaeology.

Sir:—Your rejoinder (vol. vi. pp. 478–486) to my reply to your criticism of my book calls for some further remarks from me which I herewith submit.

I. Quicherat's classification of Romanesque monuments, though it may, as I have said, have its value for some purposes, does not commend itself to me for the reason that it does not take note of the fact that an architectural style is always developed in some particular locality where the conditions have conspired to produce it. These conditions have never been the same in different localities. There is nothing in architecture corresponding to the apparently spontaneous development, in different places, of the same natural flora and fauna. In assuming that there is such a development Quicherat seems to me to make a fundamental mistake. A style may have offshoots: but in broad classification these offshoots properly belong to the regions where they originated. The exotic types of building found in any given locality are, however, rarely pure in style. They are naturally more or less modified by the local conditions so as to become unfit for strict classification with the styles from which they are sprung. Hence the geographical division, though it may not afford the means of marking the limitations of schools with absolute precision, seems to me the most natural and convenient. And I observe that you, as well as Quicherat himself, are unable to dispense with it: you speak, for instance, (p. 480) of the "schools of Burgundy, Poitou, Perigord, Auvergne, the Loire, etc."

II. In this discussion (following the thesis advanced by Quicherat) you speak of Romanesque architecture as if it were a homogeneous style characterized by the use of vaulting. On page 480 you now qualify this by the admission that the early Norman Romanesque was, as I have said, generally unvaulted. But with this exception you still assert that "Romanesque architecture is as essentially a vaulted style as is the Gothic." Now is this so? How is it with the Tuscan Romanesque—with buildings like San Miniato at Florence and the Cathedral of Pisa? How is it with the Lombard Romanesque? How is it with the large class of early Romanesque

buildings in Germany—numerous examples of which are figured in the work of Dehio and Bezold to which you refer? And how is it with the large number of timber-roofed monuments of northern France exclusive of those of Normandy—with buildings like St. Remi of Reims, Vignory, Montier en Der, Le Mans and many others? With these large groups of unvaulted buildings before us, how can it be said that the Romanesque “is essentially a vaulted style from its very beginnings”?

The vaulted Romanesque is mainly limited to Southern France, with offshoots in Spain. It is of two principal varieties—one in which the barrel-vault (of either round or pointed section) is used, and another which employs the dome. Neither of these varieties contained any principles of growth, and from them, therefore, there was no outcome. They are, structurally, survivals of ancient modes of building which assume, it is true, forms that differ in unessential ways from ancient forms; but they all alike retain the ancient inert principle of construction. We do not get any distinctly new style until the inert principle is thrown aside in the Gothic of the Ile-de-France. But the northern varieties of Romanesque, which were, early in the twelfth century, sometimes covered with groined vaults, contained the germs of this new style. It is these northern (and largely, though not exclusively, northwestern) varieties, therefore, with which alone I am properly concerned in my book—which is not a treatise on Romanesque, but on Gothic, architecture. Of these northern varieties I refer chiefly to those of Normandy and the Ile-de-France because they contain more organic and progressive systems than most others. In fact few others, I believe, except that of Burgundy, contributed much toward the formation of the Gothic style. In the passage (p. 7 of my book), which you think shows that I do not limit my remarks to the northern Romanesque, it should be noticed that I am concerned with a general statement, and I therefore, in that place, speak of the style in a comprehensive sense. But elsewhere, being concerned with the evolution of Gothic, I refer to those types of Romanesque only out of which it grew.

III. Having now, as I hope you will see, justified my statements with regard to Romanesque, and my exclusive reference to that of the north as alone calling for treatment in connection with my subject, I pass over your third section relating to the use of the term Gothic (because I think that if my main proposition be apprehended my restriction of the term will be seen to be necessary) and take up the question relating to Italian architecture.

You say (section IV), referring to Siena and Orvieto, that “in both these churches the structural arches are not pointed but round, only such secondary forms as windows being pointed; and you yourself tell us (p. 7) that pointed arches in apertures do not much differ structurally from round ones: this shows the inconvenience of substituting the term pointed for Gothic. Orvieto

has a wooden roof to its nave and structural round arches : there are not in it any structural pointed elements whatever. Siena is certainly vaulted, but the vaults differ from those usually found in Tuscan and northern churches in being flatter and more oblong. In both buildings the effect is made quite different by the closeness, greater length, and slenderness of the piers and columns, a point in which they more nearly approach the basilical Romanesque churches of Tuscany. There is more reason to call the churches of Sicily pointed than to give this name to the Cathedral of Orvieto. In fact these two churches, while having hardly anything in common, differ in almost every way from the pointed monastic churches with which you compare them, and these differences affect the vaulting, supports, forms and proportions." Now I think it is incorrect to speak of "structural" arches in the nave of Orvieto, because there is no vaulting in the aisles any more than over the nave. The form of an arch in a mere arcade has no more structural consequence than it has in a window. This part of the building would have no more structurally pointed character if its arcades were pointed instead of round—as they are, for instance, in Santa Croce at Florence. The mere forms and proportions of this church and of Siena, to which you refer, are of small structural importance, and, though in some respects (mainly in the rectangular plans of the bays) unusual, they are not, I believe, unexampled in some other Italian edifices. You fail, therefore, to disprove my statement that these two buildings differ little structurally from other Italian pointed monuments. They are like the rest in exhibiting no Gothic principles. As to there being more reason to call the churches of Sicily pointed than to give this name to the Cathedral of Orvieto, you seem to forget that *I* have not given it this name. I merely use the name by which it is (interchangeably with the name Gothic) commonly designated; and to which it is as much entitled as are most other Italian buildings of the period. For although the arcade of the nave has round arches, the most of the external openings are pointed; while its vaulted choir and transept¹ approach more nearly to Gothic than is the case with Italian pointed buildings generally.

You say "the point of special importance, however, is the general statement (p. 181) which forms the starting-point of your study, namely, that the pointed church of S. Andrea at Vercelli built in 1219 is an exceptional instance, and that pointed design did not begin to spread in Italy until about 1250." I do not regard this as a point of special importance: for, whatever a more thorough investigation of early monuments in Italy than I have yet had occasion to make might show, it would be a matter of small consequence

¹ The unqualified statement, in your review, that Orvieto is not vaulted is manifestly incorrect, and yet you make no acknowledgment of the error.

in connection with my subject, because there was never, at any time, in a proper sense, any Gothic movement whatever in Italy. Having found this to be so, the beginnings of the use of the pointed arch in that country is a subject that has not especially interested me. In my book I have attempted no more than to show the comparative tardiness of any general native movement toward pointed forms, and to illustrate the absence of Gothic principles in the characteristic buildings which were erected during the period of greatest activity in pointed design. So that even granting that there may have been an earlier use of the pointed arch than I have supposed, it does not materially affect my chief argument. How far the monuments enumerated in your list may tend to establish your position with regard to its early use I am not prepared positively to say. With many of these monuments I am unacquainted: but I will readily admit that in some cases they *may* show (I do not say that I think they *do* show) that the Italians occasionally made use of the pointed arch before 1250. I do not, however, believe it can be proved that there was any general movement in the direction of its use before that time.

The buildings on your list of which I know anything are of a very mixed character. Their pointed features are sometimes, as in the Cathedral Asti, incongruous with their general design: and it is, I think, highly probable that these features were in many, if not in all, cases interpolations. However this may be, it is certain that neither the Cistercian nor the native buildings ever, as you affirm, "exactly followed French models"—*i. e.* the models of the Ile-de-France. Take, for example, the church of Fossanova. With exception of its capitals and bases (which are indeed strikingly similar to the corresponding members in the early French Gothic), it is simply a Burgundian Romanesque structure with pointed arches substituted for round arches in the arcades, and in the ribs of the vaulting. If you will compare your photograph (vol. VI. pl. III) of its nave with a photograph of the nave of Vezelay, you can hardly fail to see that the two buildings are substantially identical. The rectangular plan of the vaulting compartments, the heavy transverse rib, the absence of groin-ribs, the springing of the longitudinal and transverse ribs from the same level (an arrangement which, as I endeavor to show in my book, is fundamentally opposed to the principle of Gothic), the composition of the piers—including the vault supports, the massive walls, and the small round-arched external openings, are all so nearly the same that both buildings might almost have been erected from the same set of drawings. Even the banding of the vaulting shafts by the abacus mouldings, and the triforium-string, is the same in both instances.² Externally Fossanova is unmodified Roman-

² The interior of San Martino al Cimino, near Viterbo, is equally unlike Gothic in its structural forms and relations; though it has some features, such as groin-ribs and

esque.³ The pointed arches of its west façade seem to be alterations ; and the great wheel window, wholly unrelated in style, as it is, to the rest of the edifice, looks to me like an insertion.

The use of the pointed arch in Fossanova is not a constructional use such as was made of it by the Gothic architects of France. The round arch might just as well have been used here, as it was used in Vezelay its prototype. Nobody thinks of calling the nave of Vezelay a Gothic structure, and there is no more reason why Fossanova should be so called. It is not at all Gothic, and no amount of influence of such a building could be the means of introducing Gothic architecture into Italy. On this account, though I recognize the interest attaching on other grounds to such a group of buildings as you bring forward, and shall look with interest for the fuller accounts of them which you promise us, I cannot regard them as having any material bearing upon what I have said in my book.

I have endeavored, my dear sir, to present these points in a true light, and I trust that in so far as I have done so I may win your assent.

CHARLES H. MOORE.

*Cambridge, Mass.,
April 21, 1891.*

Mr. Charles H. Moore.

Sir:—It is with reluctance that I continue the discussion which you have reopened, as I think it has entered upon a phase where further elucidation may become wearisome to our readers. I shall therefore seek to be brief, and shall omit any reference to your criticism of Quicherat's classification as it would lead me too far. I have stated from the beginning that I believed the geographical additions should not be abolished but be used in subordination to those that are structural.

II. In regard to Romanesque style it is evident that you have failed to grasp my meaning. It is hardly necessary to remind anyone but a tyro of the classes of unvaulted buildings built between 1000 and 1200, during

double arch orders, besides profiles and capitals, which resemble those of the early Gothic. But the essential features, namely, the forms of the vaulting—in which there is no concentration of thrusts upon a narrow line, and the single shaft carrying all the vault-ribs, are opposed to Gothic as the work of the Cistercian monks generally was in all localities. The Cistercian builders rarely did more than to imitate certain unessential Gothic features. Of the principles of the Gothic style they can hardly be said ever to have shown understanding.

³ I have, in my book, called attention to the fact that some of the early Gothic buildings of the Ile-de-France, such as the Cathedral of Senlis, retain the Romanesque characteristics externally. But these are buildings of a developing style: Fossanova is not, in the same sense, a transitional building.

what is broadly termed the Romanesque period : but I do not believe they prove what you imagine. They may be, in my opinion, divided into two classes : (1) those which are constructionally the survivals of the style of the Latin basilica ; and (2) those which, as I remarked on p. 480, vol. VI (following Quicherat), were influenced in their proportions and style by the introduction of vaulting. To the first class belongs, for example, the "Tuscan Romanesque." It is a misnomer to call such buildings as S. Miniato at Florence and the Cathedral of Pisa Romanesque because they happen to be built between 1000 and 1200. Except for their decoration, they are basilicas, of the same class as those of Rome, Ravenna and Salonica. We come next to Lombard Romanesque : here we find that the principal buildings erected or restored after 1000 have, not wooden roofs as you infer, but vaults : at Pavia, S. Michele, S. Pietro in Ciel d'Oro, S. Giovanni in Borgo, S. Teodoro, S. Lanfranco : at Milan, S. Ambrogio ; at Bologna, SS. Pietro e Paolo ; the Cathedrals of Parma, Modena, Novara, Piacenza, Ferrara, etc. There are hardly any unvaulted Lombard structures of this date. In citing numerous unvaulted churches of Northern France and Germany as further invalidating the fundamental influence of the vault on Romanesque, you seem to ignore a remark of mine which you must have overlooked, and which I will here quote (vol. VI, p. 480) : "The churches of the eleventh century which we find to have had a nave covered with a wooden roof are merely survivals or reversals due to two causes : conservatism and the ill-success, though imperfect knowledge of the laws of statics, of many of the earlier attempts at vaulting. But when, even in these early cases, the wooden roof is preserved, we find the new proportions and other elements brought in by the vaulting system to be present in them also." I believe this statement is as clear as any I can make. Let me illustrate. The Romanesque grouped pier, invented on account of the introduction of vaulting, the different members of which were created to support the spanning arches of the nave, the sub-arches of its arcades and the ribbings of the vaults are found in *unvaulted* constructions of the XI century. The great church of St. Stephen at Caen, the most important perhaps of Norman churches, was built on this plan. Its vaults were added at some unknown period in the XII century : but as M. Ruprich-Robert emphatically states (*Arch. Norm.*, pp. 63, 85), the supports of its interior consisted of grouped piers which had absolutely no meaning and no connection with the wooden roof, but were copied from some unknown (perhaps Lombard) building with cross-vaults. If then, the thickness of walls and supports, the relations of solids to voids, the proportions of the interior and exterior, the new decoration and mouldings brought about by the consequent depth of the openings to be cut in these walls—if all this was radically changed even in unvaulted buildings, as it certainly was, does it not constitute a tremendous, a decisive

group of results? And if they all derive from one cause, who can doubt that this cause is the essential element in the style? And who can deny that the vaulting is this cause? So, in asserting that "Romanesque is essentially a vaulted style from its very beginnings," I use the term *essentially* in the meaning of internally, in principle, in essence; and the bare fact that a church is unvaulted does not prevent the influence of the vault from being dominant even in this case.

We now come to your positive statement in regard to the character and limits of vaulted Romanesque; that it employs the barrel-vault and the dome; that it retains the ancient inert principle of construction and that it is mainly limited to Southern France, with offshoots in Spain. I can hardly do anything more than deny these propositions *in toto*, as a full demonstration would take a long article. I shall only make the following counter-assertions that can be easily verified by a consultation of authorities. (1) Vaulted Romanesque is as wide-spread as the boundaries of western architectural activity. (2) It used the cross-vault as well as the dome and tunnel-vault. (3) All of its varieties do not retain but *set aside* the inert principle of construction for that of balanced construction. It is an error found also in your paper read lately before the Convention of the American Institute of Architects, to claim that the principle of balance was first introduced, in the history of architecture, by the Gothic architects. The principle of balance lies at the basis of Byzantine architecture, which is thus fundamentally distinguished from the Roman. The demonstration of this fact will be found, for example, in Choisy, *L'Art de Bâtir chez les Byzantins*, where the system of internal buttresses, of interacting domes and vaults, is illustrated in detail. More imperfectly is the same principle represented in the various forms of Romanesque architecture, but its existence alone ensured the stability of vaulted constructions. The buttress-strips, the abutting vaults over side-aisles and galleries in Romanesque are certainly the result of the application of a different law from that which governed the inert Roman concrete. While no one will deny that only in the Gothic is the principle fully carried out, it is easy to prove, that the principle was known and applied, and that there is therefore a far closer alliance between Romanesque and Gothic than between Romanesque and Roman, which you wish to classify under one head.

III. In regard to Siena and Orvieto, after seeking to demonstrate that there is nothing structural at all about Orvieto you wish to fortify your contention that these two buildings differ little structurally from other Italian pointed buildings by the statement that it is so because "they are like the rest in exhibiting no Gothic principles"! On the same principle I may be allowed to point out what astonishing similarity the temple of Luxor, the Taj Mahal, the mosque of Amru at Cairo all bear to Santa

Croce at Florence—*because they are like it in exhibiting no Gothic principles*. It is such a method of reasoning and the apparent unwillingness to investigate the proofs which I brought forward in regard to Gothic architecture in Italy, that have shown me the uselessness of a controversy like this. I gave a list of over sixty monuments, embodying Gothic forms or principles, erected in Italy before 1250: such a list cannot, I believe, be surpassed if equalled for England or Germany. In each case I gave references, most of which could be easily verified. In a large number not only was the pointed arch used but the pointed ribbed cross-vault. To these facts were added the assurance, in more than half the cases, of my personal study backed by photographs. But though acknowledging a lack of acquaintance with these monuments, you appear to doubt my word and take no steps to verify my assertions and are willing merely to “admit that in some cases they *may* show that the Italians occasionally made use of the pointed arch before 1250,” adding that you do not, however, believe it can be proved that there was any general movement in the direction of its use before that time. I can only express the desire that the opportunity may speedily arise for you to become acquainted with the facts of this movement. It is not always easy to determine how many monuments it takes to constitute a movement. Apparently *two*, when France is in question and you pass from Morienvall to St. Denis in the history of the transition. I will not follow you in your discussion of Fossanova—which, by the way, so thorough a scholar as Dehio has just placed in the front rank of early Gothic buildings, thus confirming my claims for it. In this discussion you forget one essential thing. I am not claiming for Italy the general use of *Gothic* architecture but of *pointed* architecture, in the terms of your vocabulary. Therefore your arguments as to whether or not it conforms to true Gothic principles are quite beside the question, and would be in place only in case you were controverting my articles in the JOURNAL on *Cistercian architecture in Italy*. As to whether or no it is correct to say of the Cistercian builders that “of the principles of the Gothic style they can hardly be said ever to have shown understanding,” I can only say that they would have come with more force from a man who had made some study of Cistercian architecture. It is most confusing to hear that Fossanova could not be the means of introducing Gothic architecture into Italy. If put to it, you would doubtless confess that it or some of its mates had as much Gothic as any building in Italy. Then *Gothic* architecture was never introduced? Of course not, according to your contention. It was the *pointed* style that was introduced, on which even you would be obliged to grant that Fossanova could exercise an influence. I feel sure that as I continue the publication of Italian Cistercian monuments your opinion will be substantially modified. Why not get rid of this continual confusion

between *Gothic* and *pointed*: it is so artificial that you appear to lose the run of it yourself.

As you have digressed to my Cistercian papers, I will close by a reference to your paper read Oct. 24, 1891, before the Institute of Architects, on the Antecedents of Gothic Architecture, simply to take note of a few facts. The statement is made that only two writers—Viollet-le-Duc and Quicherat—have recognized that the Gothic style is essentially structural. To this list should be added Anthyme Saint Paul (*Hist. Mon. de la France*, 1884), Gilbert Scott (*Lectures on Mediæval Architecture*), Adamy (*Architektonik*) and several other writers whom the latter cites. You assert that the first true instance of grouped supports destined to carry vaulting and embrace several stories occur in the Lombard style of the XI century and that the fountain-head is S. Michele at Pavia. It is to be noted, however, (1) that S. Ambrogio at Milan (and not S. Michele) is generally regarded as the earliest church (Dartein, Viollet-le-Duc, Ruprich-Robert); (2) that the date of their piers is a matter of great dispute: they are placed as early as the IX and X centuries or as late as the XII and are consequently not very safe; (3) that the vaults of S. Michele are often dated after the fire at the close of the XII century and that it is therefore impossible to state, as you do, that they show the earliest known use of groin and longitudinal ribs; (4) the original vaulting compartments in S. Michele are *not* square, as you say, but oblong—an important fact.

In regard to the monuments of primeval Gothic in the Ile-de-France before S. Denis in 1140, in your book and in your paper, one only is mentioned,—Morienvall, that earliest of Frankish works in which the pointed ribbed cross-vault appears in its most primitive form. But I would call your attention to the chapter on *Le Gothique Rudimentaire* in Gonse's volume *L'Art Gothique*. Here are mentioned and described some twenty-five buildings which illustrate every step of the gradual development of Gothic vaulting from Morienvall to St. Denis. It is a most complete and charming piece of historical demonstration, and supplies the material so much desired and so long sought in vain by writers on the origins of Gothic architecture. Another paper, in which a few such buildings are mentioned, is that by Von Bezold in the *Zeitschrift für Bauwesen*, 1891, p. 162, entitled *Die Entstehung und Ausbildung der Gothischen Baukunst in Frankreich*.

A. L. FROTHINGHAM, JR.

Princeton, October, 1891.

SUMMARIES OF PERIODICALS.

BULLETIN DE CORRESPONDANCE HELLÉNIQUE. 1890. Jan.-

Feb.—M. HOLLEAUX, *Excavations at the temple of Apollon Ptoös. Inscriptions.* Here are published eighteen inscriptions found in the vicinity of the temple of Apollon Ptoös. They comprise the inscriptions in Ionian characters, and therefore are later than 350 B. C. Several are of considerable length. A valuable summary is given of all the references, in these and other inscriptions, to the government of Akraiphiai, showing a constitution practically identical with that of other Boiotian towns, with officers consisting of the Archon, Polemarchoi, Katoptai and Tamias and two legislative bodies, the Synedrion or Council, and the Damos or Popular Assembly. Six inscriptions are decrees voted by Boiotian towns in response to the invitation to join in the Ptoian games. The references to the little-known Ptoian games are valuable. They show us, that the games were held every four years near the Sanctuary of Apollon and not in the town; that sacrifices to Apollon and other divinities preceded the games; that the *Agonothetes* gave banquets to the citizens and strangers assembled at the festival; that the festival opened with processions and national dances, and consisted of musical and poetic contests. The following towns are mentioned as having officially shared in the celebration of the contests: Kopai, Lebadeia, Orchomenos, Tanagra, Thebai, Thespiiai, and Thisbai (to be continued).—G. FOUGÈRES, *Excavations at Mantinea* (1887–88). I. *The enclosure and the surroundings* (pl. I). Of modern travellers who have visited and described the ruins of Mantinea, only Gell was provided with instruments to make a plan of the enclosure. His plan, however, is circular, whereas the actual lines of the walls enclose an irregular oval space. The wall is built of hard trapezoidal stones laid in horizontal layers, which served as a base for a rampart of brick. It is divided into ten segments of unequal lengths and flanked with 122 towers of unequal heights. The ten gates are constructed on different models, all with a view to the most effective defence. The observations of M. Fougères reveal no small amount of inaccuracy in the descriptions by previous explorers.—G. COUSIN and CH. DIEHL, *Inscriptions from Halikarnassos*. Eighteen inscriptions from Halikarnassos and three from the peninsular of Myndos are here published with annotations.—H. LECHAT, *Archaic statues from Athens* (pls. VI, VI bis). Reproductions in heliogravure are here given of an unpublished statue found on the Akropolis in Oct. 1888. The body differs little from that of other Archaic statues of the Delian type found on the Akropolis,

but the head exhibits, according to M. Lechat, a charm of expression and a delicacy of execution quite rare in Archaic sculpture. Two other Archaic Athenian statues are studied in this paper, one of which was published in the *Musées d'Athènes* (pl. ix), the other in the *Ἐφ. Ἀρχ.* (1888, pl. vi). A similarity of style and marble is recognized, and a close relationship to the statue of Hera found at Samos (*Bull. de corr. hellén.*, 1880, pls. xiii, xiv). They are therefore considered to be Samian. The Egyptian influence which may be recognized in them is explained by the known intercourse of Samos with Egypt during the vi century.—C. CARAPANOS, *Inscriptions and statuettes from the oracle at Dodona* (pls. iv, v; 7 facsimiles). The inscriptions, engraved on small plaques of lead, are records of questions addressed to the oracle and of the responses. Preserved in the temple they probably formed a reference library for the priests. Eighty-four of these plaques were discovered by M. Carapanos in 1876-77 of which forty-two were published in his book, *Dodone et ses ruines*, 1878. Six more have been deciphered and are here published. Six bronze statuettes are also illustrated, representing three priestesses, two priests, and a Herakles. The objects held by the priestesses throw light upon the mode of obtaining a response from the oracle. One holds a dove (cf. Strabo, vii, 1), another a round object, perhaps for casting lots (cf. Cicero, *De Div.*, i, 34), and the third a jug for drawing water from the fountain of Dodona (cf. Pliny, *Hist. Nat.* ii, 103, 106).—V. BÉRARD, *Inscriptions from Telmessos*. Twelve inscriptions discovered by M. Bérard and M. Fougères in May-June, 1889, in and about the town of Makri.—P. FOUCART, *Athenian Decree of the fifth century*. This decree, found in the church of St. Andrew, may be dated, from the forms of the letters, shortly after the middle of the fifth century. Its purpose was to exclude fugitive slaves and thieves from the Akropolis.

March-April.—M. HOLLEAUX, *Excavations at the Temple of Apollon Ptoös. Inscriptions* (contin.). Publication of fifteen inscriptions, which are of importance in showing that the oracle was longer-lived than is usually supposed. Most historians (following Pausanias, ix. 23. 6) assert that the destruction of Thebai by Alexander put an end to the oracle and sanctuary of Apollon Ptoös. In opposition to this—four inscriptions show that the oracle was frequented at the end of the fourth century, and six that it was continued up to the end of the third century: others show that during the third and second century offerings were made to Apollon Ptoös by different Boiotian towns, that in the second century the Ptoian games were established, and that during the second and first century honorary decrees were placed in the *temenos* of the Ptoion. Under the early empire, there would appear to have been an interruption in the games and a decadence in the cult, but under Hadrian we find them again in operation.—P. JAMOT, *Archaic Terracottas from Tanagra* (pls. xiii, xiv). One of these is a

rude flat figure of an oriental goddess crowned with a high *kalathos*. The ornamentation of the flat stelê-like body is in horizontal bands, which are an index of the structure as well as the decoration of the costume. Other variants of this type are here studied. The other figurine is that of a mounted horseman and is more advanced in its execution than other figures of the same class found at Tanagra. Figures of a similar kind have been found at Athens, Corinth, Tegea, Kypros, in Boiotia. They seem to represent the military escort of departed souls.—G. RADET, *Inscriptions from the neighborhood of the Maiandros*. One of these found near Nysa mentions the right of asylum, which would seem to point to a temple in the neighborhood. Strabo (xiv. 1. 44) speaks of a Ploutonion, between Tralleis and Nysa on the hill Acharaka, consisting of a sacred wood, a temple of Plouton and Kore, and an adjoining cavern called the Charonion. A cavern and remains of the temple have been found at Salabakli, between Nysa and Tralleis, which seem to be the Ploutonion and Charonion mentioned by Strabo. Sixteen inscriptions from this region are here published.—N. I. GIANNOPOULOS, *Inscriptions of the eparchy of Almyros*: eight in number.—G. FOUGÈRES, *Excavations at Mantinea* (1887–88). II. *Topography within the enclosure* (pls. xvii, xviii). A reply to Schliemann. Though not comparable to the excavations at Olympia, Delos, or Epidaurus, the remains unearthed at Mantinea are of special interest and importance. The theatre situated in the centre of the town has several peculiarities. The wings are not symmetrical, probably because the site was partially occupied by temple structures. There were no seats of honor, as at Epidaurus and Athens. The uppermost seats might be reached by a system of external stairways. These were of special use as exits. The orchestra seems to have been unpaved, and the stage was irregular in form. Adjoining the theatre are the foundations of two small structures, in the form of *templa in antis*, possibly the Heraion mentioned by Pausanias, and the temple of Zeus Soter mentioned by Thoukydides. A more ancient structure to the N. E. of the stage was possibly the Podareion, indicated by the inscriptions on two tile-fragments found in the immediate neighborhood. To the S. E. and E. of the theatre, we find the ruins of the Bouleuterion and of the Agora. The Bouleuterion is identified by the analogous structure at Olympia. The Agora is a rare if not the only example of the primitive Agora. Though constructed in Roman times, it is not surrounded by a continuous porch. An inscription found in the N. porch mentions the benefactions of Euphrosynos and his wife Epigone, consisting of temples, festival-halls, treasuries, a market-place with an *exedra*, a gallery, and a peristyle. Almost all of these may be identified. Besides the classic remains, mention is made of four Byzantine churches within the enclosure. In the reply to Schliemann, M. Fougères defends

himself against the attack made by Schliemann in the *Berl. Zeitschr. f. Ethnol.* (Jan., 1890).—W. R. PATON, *Inscriptions from Rhodes*. Two inscriptions are here published. One gives a new name of a sculptor, SIMOS of Olynthos; the other, a long list of names of citizens who united in honoring one of their fellow-citizens who was victorious in the *Πορμαία* celebrated in honor of Rome (II cent. B. C.).—S. K. PANTELIDES, *The spring journey of Theokritos confirmed by inedited inscriptions*. Several unpublished inscriptions from Kos, which establish local allusions to Kos in the Idylls of Theokritos.—H. LECHAT, *Observations on the Archaic Female Statues in the Akropolis Museum*. This is a very careful review of the details of costume, mode of covering the feet, dressing the hair, of the jewelry and other ornaments and of the technical construction of the statues. In respect to costume these statues may be classified by the presence or absence of the himation and of the ἐπίβλημα. The feet are usually uncovered, and are sculptured with great care; when covered it is ordinarily with sandals, but one statue has boots with curved ends. The hair is usually arranged in the same way, with three or four long tresses falling in front and a mass of tresses behind; that which appears between the *stephane* and the forehead is treated with greater variety. The jewelry consists of the *stephane*, crowns of pearls or simple bands, earrings, necklace, and bracelet. The *μηνίσκος*, which stood upon the heads of many of the statues, appears to have been neither a parasol nor a lotos-flower, but a metallic crescent-shaped object to prevent the birds from resting on the heads of the statues. These statues were not constructed from single blocks of marble, but from several blocks cemented or clamped together. The eyes of some of the statues were not carved from the marble, but made of other material and inserted.—P. FOUCAERT, *Inscriptions from Karia*. A publication of sixteen inscriptions from Karia. One records the name of an unknown Athenian sculptor PHILISTIDES. As the inscription was found near Halikarnassos it is possible that Philistides was one of a group of artists attracted there by Mausolos.—E. POTTIER, *Fragments of Terracotta Sarcophagi found at Klazomenai* (pl. II). The principal fragment which is here reproduced represents a wild boar attacked by two lions. The animals are painted in black on a white ground. The sarcophagus might be assigned to the second half of the VII century; P. places it near the close of the VI century (to be continued).—V. BÉRARD, *Archaic Statue from Tegea* (pl. XI). Pausanias speaks of two temples on the road from Tegea to Argos, one of Demeter ἐν Κορυθαῖσι, and one of Dionysos Mystes. These may be identified from their foundations which still exist at Hagiorgitika. At the largest of these, the temple of Demeter, was found an Archaic seated female statue. It seems to be a product of the ancient Argive school.—H. LECHAT, *Ancient bronze Bits*. Two bronze bits are here figured. One of them was found in 1888

on the Akropolis at Athens, the other, of uncertain provenance, is in possession of M. Carapanos.

ALLAN MARQUAND.

ΕΦΗΜΕΡΙΣ ΑΡΧΑΙΟΛΟΓΙΚΗ. JOURNAL OF THE ARCHÆOLOGICAL SOCIETY IN ATHENS. 1890. Nos. 1, 2.—K. D. MYLONAS, *Votive Relief from Attika* (pl. I, and supplementary pls.). The relief published represents two *naiskoi*, in each of which is a figure of Athena in a long garment, with helmet, spear, aegis, and shield. The two figures are almost identical, but the gorgoneion upon one shield is larger than that upon the other. Other examples of double representation of deities are compared, and the opinion is expressed that such reduplication is due to the wish to represent the deity under two aspects, while the identity in form of the two representations arises from the early confusion of the various qualities of the deity, and the fixity of the artistic type.—W. KLEIN, *On two vases of the Epiktetic cycle found in Greece* (pl. II; cut). A kylix by Pamphaios and a paropsis by one Hermokrates are published. The kylix, found in Boiotia, represents a youth crouching, with his hands in a large washbowl which rests upon his knees. Other vases of Pamphaios are mentioned. The cut represents the painting of the vase No. 22 (in Klein's *Meistersignaturen*), showing a nude man leaping into or out of a great cask, with the aid of a ring by which he pulls himself up. The paropsis of the hitherto unknown artist Hermokrates, is fragmentary. It was found on the Akropolis. It represents a flute-player. These vases are red-figured.—K. DAMIRALES, *Relief of the Birth of Christ* (pl. III). A marble relief from Naxos is published. In the centre is the child wrapped in swaddling clothes and lying in a manger between two trees. Behind the manger are an ox and an ass. Above this scene is the lower part of a relief representing a man followed by an ass; probably the flight into Egypt was represented. The date assigned is "the first centuries after Christ."—D. PHILIOS, *Excavations near Megara* (pls. IV, VI; 3 cuts). The excavations described were undertaken as a result of Lolling's article (*Εφ. Ἀρχ.*, 1887, p. 201 ff.). See Paus. I. 44, 6–10. The route of Pausanias was the road of Hadrian (= the modern chaussée and railway), not the path called *Τουρκόδρομος*. Remains of several buildings were uncovered, plans of which are given. One complex of buildings is identified as the sanctuary of Zeus Aphetios, a small temple surrounded by larger buildings. Some utensils of metal, fragments of pottery and sculpture are published.—H. G. LOLLING and D. PHILIOS, *Megarica*. Lolling combats some of the positions taken by Philios in his account of the excavations, and Philios replies. Lolling maintains that Pausanias follows the *Τουρκόδρομος* in his description and that his expression *ἐπὶ ἄκρῃ τοῦ ὄρους* means "on a spur of the mountain," while Philios renders these words "on the top of the mountain," and regards the road of Hadrian as

that followed by Pausanias.—H. G. LOLLING, *Inscriptions from the temple of Apollon Hyperteleates*. Four inscriptions; No. 1 (facsimile) is a rudely inscribed dedication Ἀπείλωνι, of the fifth century B. C. No. 2 is a mere fragment; Nos. 3 and 4 are fragmentary honorary decrees of the third century B. C.—D. PHILIOS, *Inscriptions from Eleusis* (continued). Nos. 48–57. No. 48 completes *C. I. A.*, II, No. 314, the inscription in honor of the comic poet Philippides. The new fragment must have been carried at some time from Athens to Eleusis. The deme of Philippides was Kephale. No. 49 is a fragment of an honorary decree in the archonship of Thersilochos. No. 50 is the beginning of a decree of the second quarter of the third century B. C. The relief upon the stone may have represented Demeter and Kore. No. 51 is a fragmentary decree of Macedonian times, in honor of [Ia?]lemos for adorning the temple of Pluto, and for good conduct concerning the sacred things and the family of the Eumolpidae. No. 52 adds two new fragments to the decree in honor of the general Demainetos (Εφ. Ἀρχ., 1887, p. 1). From these we learn that his father was Hermokles, not Hermodoros. No. 53 is a fragment of a decree honoring an Hylleian man. No. 54 is a fragment of a vote or decree of the soldiers of Eleusis, Panaktos, and Phyle in honor of a general. In date and character it is like the vote in honor of Demainetos. No. 55 is a fragmentary decree in honor of the epheboi of the tribe Hippothontis. The date is the archonship of Ktesikles, 334 / 3 B. C. No. 56 records the erection of a statue of Ekphantos son of Euphanes, a Thriasian, by the soldiers under his command; a list of the soldiers' names is appended. The date is late Macedonian or early Roman times. No. 57 is a fragmentary list of temple-treasures in letters of the time before Eukleides.—D. PHILIOS, *Archæological News*.

No. 3.—ST. A. KOUMANOUDES, *Inscriptions from Athens*. Twelve inscriptions, all fragmentary. Nos. 1, 8, 10 and 11 are lists of names, No. 1 in letters of the time before Eukleides, the others of late date. The rest are honorary or dedicatory.—D. PHILIOS, *Inscriptions from Eleusis* (continued). Nos. 57a–60. No. 57a is a very small fragment of an account. No. 58 is a fragmentary account of expenses, in letters of the time before Eukleides. No. 59 is a fragmentary account of the size and number of stones brought to Eleusis for a πρόστυπον. The inscription resembles that published in Εφ. Ἀρχ., 1883, p. 1, pl. I, and like that, is part of the account of the building of the stoa of Philon. No. 60 is a decree of the senate and people of Athens in honor of Pamphilos, son of Archon, ex-demarch of Eleusis, after which is a triple dedication by the people (of Athens), the people of Eleusis, and the senate (of Athens), followed in turn by a (fragmentary) decree of the Eleusinians. The date is the archonship of Pelops, who is ascribed to the second century B. C.—O. KERN, *Gods of Healing on a Vase from Boiotia* (pl. VII; 2 cuts). A red-figured krater in the Poly-

technaion at Athens is published. On one side is a seated goddess to whom a girl is bringing a paropsis (salver) with fruits, cakes, and a lighted candle. On the wall hang garlands and models of human limbs. On the other side of the vase is a reclining bearded figure with a wreath about his head. In his left hand he holds an egg, in his right a cup from which a great serpent is about to drink. Similar representations are briefly discussed. The deities are Asklepios and Hygieia. The scene is familiar, belonging to the type represented by the Spartan reliefs and the "Nekrodeipna."—ST. A. KOU-MANOUEDES, *Inscriptions from Athens*. No. 1 opens with a Latin letter from Plotina to Hadrian asking that the succession in the Epicurean sect be permitted to those who are not Roman citizens. Hadrian's reply, in Latin, grants this request. Plotina then publishes her success in Greek. Nos. 2-8 are fragmentary, but are all parts of decrees, unless it be Nos. 3 and 4, which are too fragmentary to be determined.—S. N. DRAGOUMES, *Epigraphical Suggestions*. The suggestions refer to *Bull. de corr. hellén.*, XIV, p. 414; VI, p. 613; X, p. 178.—I. N. SVORONOS, *Archaic Greek Coins* (pl. VIII). I. Hebrytelmis, king of the Odrysai; II. Aermenaos, king of the Macedonians. False coins; III. Kalchas and his son. Chronology of the earlier coins of the Kalchedonians; IV. An uncertain coin of Krete (contribution to the Cretan alphabet). Thirty-one coins are published and discussed. The coins of Aermenaos are declared to be false.—D. PHILIOS, *Additions and Corrections*.

HAROLD N. FOWLER.

JAHRBUCH D. K. DEUTSCHEN ARCHÄOLOGISCHEN INSTITUTS.
Vol. V. 1890. No. 3.—F. WINTER, *Silanion* (pl. III; 6 cuts). A head in the Villa Albani is shown, by comparison with coins and other works, to be (as was already seen by Visconti) a head of Sappho. It belongs to the Attic school of the fourth century B. C. Comparison with the busts of Plato shows that the Sappho belongs to the same time and school and perhaps to the same artist as the original of the busts of Plato. The only famous portraits of Plato and Sappho were by Silanion. The bust of Thoukydides (the one in Naples is declared to be the best copy) is also ascribed to Silanion on account of similarity of treatment with the Plato and Sappho. The heads of Sophokles in London, Paris, Rome, and Berlin are of two classes, one of which seems to be derived from a portrait of the fifth century B. C., while the other shows the furrowed brow and the treatment of the hair and mouth characteristic of Silanion. Lysias in Naples, and the Aischylos of the Capitoline Museum (Friederichs-Wolters, 487), are derived from works of Silanion, but have passed through Hellenistic workshops. The original of the head of Homer (wrongly called Epimenides) in the Vatican, Museo Torlonia, and Capitoline Museum is also ascribed to Silanion. The strength of Silanion lies in reproduction of what is visible, and

in the expression of real character. He is not an idealist. Silanion's treatment of the human form is illustrated by the Diomedes in Munich (Brunn, *Besch. d. Glypt.*, No. 162).—K. WERNICKE, *Marble Head in Cambridge* (2 cuts). A head in the Fitzwilliam Museum, hitherto called Hermarchos, is a portrait of Plato, probably after the original by Silanion.—R. ENGELMANN, *Tyro* (3 cuts). The vessel (pail) in the Czartoryski collection in Paris was published by J. de Witte (*Gazette archéol.*, 1881–82, pl. 1, 2) and interpreted as the meeting of Poseidon and Aymone. The picture represents, however, two scenes. The first is the entrance of Herakles into Olympos; the second is interpreted, with the aid of two Etruscan mirrors, as Tyro, her son Pelias, her father Salmoneus, and her future husband Kretheus. Sophokles wrote two tragedies called Tyro. One treated the fable (Hyginus, f. 60) of Tyro murdering her sons to save her father; the other (and better known) tragedy treated the story of Tyro as the beloved of Poseidon, suffering abuse from her stepmother Sidero. The fragments of this tragedy are discussed. It is to the fable as treated in this play that these drawings of the vase and the mirrors refer.—F. GILLI, *On the Ship-relief in Salerno* (2 cuts). The vessel figured on the relief published by Assmann (*Jahrb.*, 1889, p. 103) is a small freight vessel some 7 or 8 m. long by about 1.5 m. deep and 2 m. wide. The vessel had a hatchway reaching from side to side, which was covered so as to be strong and watertight. The details of this arrangement are discussed. The place for the crew (3 men) was in the stern. The mast was in the stern, and could be let down, falling toward the bow. Various minor details are discussed.—R. KEKULÉ, *On the Representation of the Creation of Eve, a Study for the Parthenon Pediment* (12 cuts). In the eastern pediment of the Parthenon was represented either the actual creation of Athena from the head of Zeus, as in vase paintings (Gerhard), or the moment after the creation (Welcker), or the moment before it (Brunn). In representing the creation of Eve Christian artists had to solve a problem similar to that attempted by the artist of the pediment. The earlier and smaller works represent the rib changing to a woman in the hand of God, or (and this is for a long time the regular type) Eve appearing from the side of Adam. This type corresponds to the type of Athena appearing from the head of Zeus. The later and more monumental works show Eve already created standing beside Adam, but so that at least one foot is hidden by him as if to indicate that she was born out of him. Analogy would lead us to think that Athena in the Parthenon pediment must have stood in a similar way close to Zeus. A list of 74 representations of the creation of Eve is given.—P. J. MEIER, *On the Eubuleus bust of Praxiteles*. This bust was intended to be placed upon a 'term (Herm)' and the shoulders of the bust together with the upper part of the 'term' were to be covered with real drapery.

This would hide the comparatively careless treatment of the marble drapery. The head was intended to be seen not directly from in front, but in three-quarters front position.—P. WOLTERS, *On the Mosaic of Monnus* (2 cuts): published in the *Antike Denkm.*, I, 1889, pls. 47–49. The head of *Ennius* in the mosaic is to be identified with the heads usually called Scipio the Elder (Bernoulli, *Röm. Ikonogr.*, I, p. 36 ff.). The head of *Esiodus* is identified with a series of heads formerly called Apollonios of Tyana, but called Homer by E. Q. Visconti (*Iconogr. greca*, I, p. 62).—ARCHÄOLOGISCHER ANZEIGER.—*Acquisitions of the Collections of Antiquities in Germany*: I. *Berlin*, 1889. (15 cuts). Eight originals and seventeen casts of sculpture; ten separate vases besides a collection of 17 Greek vases with reliefs and inscriptions (Robert, *Winckelmannsprog.*, 1890), several archaic vases from near Rome, and fragments of “Aretine” pottery (from the Dressel collection); 9 bronzes, besides a number of primitive bulls of bronze and lead; a number of “Campana” reliefs, ornamented tiles, and terracotta statuettes (from the Dressel collection), a collection of Roman lamps, and six other terracottas, several ornaments of gold and engraved stones; and a small number of unclassified objects; to which are added the duplicates received from the excavations at Olympia, and the objects from the graves of Paraskevi in Kypros.—II. *Munich*. A bronze mirror from Hermione, and three ornamented strips of bronze from Rome.—III. *Dresden* (19 cuts). Eight gold ornaments from Egypt, and a seal ring found in Saxony; a number of terracotta statuettes (5 published); two Attic lekythoi; and a few miscellaneous objects from Egypt.—IV. *Stuttgart* (K. Staatsammlung vaterländischen Kunst- u. Altertumsdenkmäler) (3 cuts). A number of small objects found chiefly in Württemberg. The most interesting is a small bronze representing a Nubian boy. v. *Karlsruhe*. No acquisitions.—ACQUISITIONS OF THE BRITISH MUSEUM IN THE YEAR 1889. This report is made up from A. S. Murray’s report to Parliament (June 1890) and Cecil Smith’s monthly reports in the *Classical Review*.—REPORTS OF MEETINGS OF THE ARCHÆOLOGICAL SOCIETY IN BERLIN, 1890.—JUNE. *Winter* on the Ἐφημερίς Ἀρχαιολ. for 1889, especially the excavations at Vaphio near Amyklai (the two gold cups found there are published); *Trendelenburg*, on Pliny’s description of the Mausoleum at Halikarnassos; *Gercke*, on Corn. Nep. *vita Attici* 3, 2.—JULY. *Kekulé*, on the form and ornament of the earliest Greek and pre-Greek vases; *Treu*, on a torso of Asklepios from Olympia (*Ausgr.* III, p. 176, 2), and on the eastern pediment of the temple of Zeus; *Pomtow*, on an inscribed base from Delphi; *Winter*, on the relations of Mykenaeen monuments to Egyptian and Hittite art.—NEWS OF THE INSTITUTE.—NOTES TO THE PUBLICATIONS OF THE INSTITUTE. *Puchstein* adds a correction to his article on the Parthenon Sculptures (*Jahr.*, 1890, No. 2).—BIBLIOGRAPHY.

No. 4.—C. ROBERT, *The Mosaic of Portus Magnus* (pls. iv–vi; cut). This mosaic was discovered in 1862 and has been twice published (*Bulletin trimestriel des Antiquités africaines*=*Revue de l'Afrique française*, II, 1884, pl. 5, p. 117, and v, 1887, pl. 4, p. 395). It formed the decoration of a triclinium. Four mythological scenes are represented, framed in a border of various patterns with masks and Bacchic scenes. The chief scene is explained with the aid of Hyginus (fab. 140 and fab. 53). Poseidon is driving away the serpent Python, while a wind-god (Aquila) is bearing Leto away upon his back. This takes place at the bottom of the sea in the presence of a nymph (Castalia), the genius of the harbor (Portus Magnus) and a sea-centaur. On the surface of the water are Nereids and sea-monsters. The other scenes are Apollon and Marsyas, Herakles in conflict with a centaur, and two youthful figures playing with a panther or lioness in the presence of several other persons. This last scene is explained as the *παῖς Καβίρων* and Pratolaos, in the presence of their parents and three attendant women, before a statue of the Great Mother. In the previous scene, the Centaur is Cheiron, and his pupil, the boy Achilles, is coming to his assistance. The passages of Hyginus and other authors in support of these interpretations are discussed.—A. E. J. HOLWERDA, *Corinthian-Attic Vases* (6 cuts). These vases, formerly called Etruscan Amphorae, are, in the early stages of their development, little more than close imitations of Corinthian work, but by the adoption of types and methods from Ionic-nesiotic art pave the way for the development of the black-figured, and subsequently of the red-figured, style. Side by side with the monochromatic art of the Peloponnesos, there existed a polychromatic manner of painting, the legitimate descendant of the early art of Mykenai. The passages in Pliny relating to the early history of painting are discussed to prove the above statement. The *κατάγραφα*, or *obliquae imaginis*, of Pliny refer to figures so placed as to require a knowledge of perspective for their representation. The ornamentation and the scenic types of the paintings on vases of this class are discussed. The alternating palmette-lotos pattern is derived from metal work (in wire). Most of the types of scenes on these vases are derived from Peloponnesian art. Two lists of vases of earlier and later divisions of this class are given.—F. KOEPP, *The Restoration of the Temples after the Persian Wars*. Plutarch (*Pericl.* 17) says that Pericles proposed a Panhellenic congress at Athens to consult for the restoration of the temples destroyed by the Persians. This proposal must have been made about 460 B. C. The oath of the Greeks (Lycurg. in *Leocr.* 81; Diod. Sic. xi. 29) not to restore the burnt temples is shown to be an invention of a time later than Isokrates (cf. Isocr. *Paneg.*, 156). The ruined temples mentioned by Pausanias were (at least in almost every case) destroyed by others than the Persians. The old temple of Athena on the Akropolis would

appear from this to have been restored even if its continued existence were not proved by the inscriptions.—**ARCHÄOLOGISCHER ANZEIGER.**—**F. KOEPP**, *Edward Schaubert's manuscript remains* (cut). The museum of the University of Breslau possesses a great quantity of manuscript matter left by E. Schaubert, who was in Athens in the years immediately after the war for Greek independence. Schaubert and Chr. Hansen made a chart of Athens and its surroundings, and a plan for the new city of Athens, which was, however, not adopted without considerable changes. Schaubert's manuscripts contain plans and drawings of antiquities in and about Athens, and in other parts of Greece, as well as some few in Italy. His plan of the excavations of the grave of Koroibos on the borders of Elis and Arcadia (Dec. 1845, and Jan. 1846) is here published. While the value of some of his papers has been destroyed by subsequent publications of the objects depicted or described, not a few are unique and all are interesting.—**ACQUISITIONS OF THE COLLECTIONS OF ANTIQUITIES IN GERMANY.** VI. The West-German collections (April 1889–1890). Reports from *Strassburg, Metz, Mannheim, Frankfort, Homburg, Wiesbaden, Worms, Mainz, Trier, Bonn, Cologne*, and *Xanten* announce few acquisitions, chiefly inscriptions and lesser objects found in the neighborhood of the respective cities. Excavations of Roman remains have been conducted near Trier and Bonn. VII. *Mannheim*, Grossherzog. Hofantiquarium (8 cuts). This collection contained in 1880 14 Etruscan ash-chests, over 200 Greek, Etruscan and Roman small bronzes, a few Greek and Roman marble sculptures and lamps, about 1000 numbers of local (vaterländische) antiquities and over 300 mediæval and ethnographic objects. Since 1880 the following objects have been acquired:—The contents of two graves (a *tomba a fossa* and a *tomba a cassone*) at Vulci, one (*tomba a ziro*) at Podere Dolciano near Chiusi, one (*tomba a camera*) at Petrignano near Castiglione del Lago, and one at Orvieto. These consist of vases, terracottas, ornaments, utensils, etc., further, 2 Corinthian vases, 7 black-figured and 7 red-figured Attic vases, 11 Lower-Italian (Lucanian) vases, 2 Bucchero vases, and a number of small vases from Rhodos and Tarentum; 7 terracottas including two ash-chests, besides about 300 pieces from those found at Tarentum (*Bullettino*, 1881, p. 196): 6 bronzes, a gold earring and a piece of gold filigree work: a block with a ram's head, a Mithras-relief, and a number of casts. VIII. Private collections. Antiquities in *Leipsic* (20 cuts): 5 terracottas and one bronze, belonging to Commerzienrath Julius Meissner, and 13 bronzes and one marble head belonging to Theodor Graf, are published and described. Ancient vases in the Suermondt-Museum at *Aix-la-Chapelle*: 29 vases are described, and numerous vases and other remains of local antiques are mentioned.—**CASTS FOR SALE.** Casts of the fragments of the Æginetan sculptures in Munich are to be obtained from Prof. Dr. H. v. Brunn. Casts of Nos. 59,

61, 62, 88, and 90 (Michaelis, *Anc. Marb. in Great Britain*) of the Landsdowne-house collection have been made by Brucciani.—REPORTS OF MEETINGS OF THE ARCHÆOLOG. SOCIETY IN BERLIN, 1890.—NOVEMBER (cut). *Puchstein*, on two fragments of ancient marble roof-tiles from Ephesos; *Borrmann*, on ancient roofs; *Curtius*, on the inscription relating to the old temple of Athena; *Furtwängler*, on the excavations at Polis-tis-Chrysokou in Kypros, and on some marbles of the Petworth collection; *Conze*, on some unexplained objects in the akroteria of two Greek gravestones.—NEWS OF THE INSTITUTE.—NOTES ON THE PUBLICATIONS OF THE INSTITUTE. Remarks (by *Conze*) on a new restoration of the Praying Boy in the Berlin Museum (3 cuts). Addenda to *Conze's* article on ancient braziers (2 cuts).—BIBLIOGRAPHY.

Vol. VI. 1891. No. 1.—O. BIE, *The History of the House-Peristyle*. The Tirynthian house derives its plan from Egypt. The Trojan house and the Tirynthian are identical, at least in origin. In Tiryns the court is not surrounded by a peristyle, but the doors and gates opening into it have vestibules which taken together give nearly the effect of a peristyle. The houses of Sokrates and Kallias described by Plato are discussed. The μέγαρον was the most important part of the Homeric house, but the court gained in importance, and, with its peristyle, became the distinguishing feature of the Hellenic and Græco-Roman house.—B. SAUER, *The Eastern Pediment of the Temple of Zeus at Olympia* (25 cuts). The figures and fragments of this pediment are subjected to minute examination. Treu (*Jahrb.* 1889, p. 266 ff.) and Six (*Journ. of Hellen. Stud.*, 1889, p. 98 ff.) proved the existence of chariots, but neither of them placed the horses correctly. The outside horse should hide the next one only in part. In regard to the arrangement of the other figures some new results are obtained. Treu marked the figures by letters A–P, arranged in alphabetical order from left to right. Retaining the same letters for the figures, the order now proposed is A E L D B G F H K I C M N O P. An altar stands between H (Zeus) and K, and a vase between H and F. These results are secured chiefly by technical considerations. Other monuments are compared, and the mythological interpretation of the scene is discussed. By the new arrangement symmetry in the masses and measure of the figures is obtained while symmetry in posture is disregarded.—B. GRAEF, *Fragments of a vase from the Akropolis* (pl. I; cut). Fragments of a vase of the style of Hieron are published and discussed. There seem to have been two scenes, a sacrifice at an altar, and an assembly of deities. Of the deities Hermes, Poseidon, Hera, Amphitrite, and Zeus, with the infant Dionysos in his hand, are recognized. Similar representations are discussed and one (Luynes, *Descr.*, pl. 28, *Nouvelles Annales*, pl. IX) is published.—M. FRÄNKEL, *Collections of Paintings and the Study of Paintings in Pergamon*. An inscription from

Delphi (*Bull. de corr. hellén.* v, p. 388 ff.) is published with new restorations. Three artists were sent by a Pergamene king, probably Attalos II, to copy paintings in Delphi. The Delphians made them *πρόξενoi*. Although the canon of ten orators is due to Caecilius, and there never was a canon of painters or sculptors, paintings of former times were studied at Pergamon under Attalos II. Antigonos of Karystos, as well as Polemon, may have made use of the collections of Attalos II.—**ARCHÄOLOGISCHER ANZEIGER.**—*The Collection of Casts in the Albertinum in Dresden* (2 cuts). The old Zeughaus near the Brühl Terrace, behind the Belvedere, has been transformed into a museum of sculpture. The building itself, and the arrangement of casts, are carefully described by the director, Dr. G. Treu.—*Acquisitions of German University Collections: Bonn* (120 cuts). A marble Seilenos from Rome (Jordan, *Marsyas auf dem Forum in Rom*, pl. III, c.), fragments of Egyptian vases, 25 Greek vases of styles from the "Mycenean" to Hellenistic and Roman, one lamp with relief, 4 terracottas, 3 bronzes, described by G. Loeschcke.—*Antiques in Private Possession in Dresden* (22 cuts). The collections Fiedler, Meyer, Nofsky, Schubart and Woermann, consisting chiefly, though not exclusively of vases and terracottas, are described by G. Treu.—*Herfurth collection in Leipsic* (4 cuts); ten terracottas from Myrina, described by Th. Schreiber.—*Rogers Collection*. Talfourd Ely describes 20 vases formerly belonging to the Rogers collection, now the property of Miss Emily Sharpe; also 6 vases in the possession of the Misses Field, Hampstead, 4 of which belonged to Samuel Rogers.—**REPORTS OF MEETINGS OF THE ARCHÆOL. SOCIETY IN BERLIN, 1890.**—**DECEMBER 9.** Winckelmann's birthday. *Curtius*, on the history and progress of archæology, especially of the German Institute; *Conze*, on the Praying Boy in the Berlin Museum; *Mommsen*, on the investigation of the Roman-German *Limes*; *Furtwängler*, on the artist Kresilas and the works to be ascribed to him.—**1891. JANUARY** (cut). After a business meeting, a number of books and other publications were exhibited and discussed by various members, and *Curtius* spoke of the late Dr. Schliemann.—**FEBRUARY** (cut). The society voted to take part in ceremonies in honor of Schliemann; various publications were exhibited and discussed; *Immerwahr* spoke on traces of the Lapithai in the Peloponnesos; *Puchstein*, on a wooden disk with reliefs in "Mycenean" style bought in Cairo in 1842; also on the sarcophagus of Mykerinos; also on the early Greek house.—**NEWS OF THE INSTITUTE.**—**NOTES ON THE PUBLICATIONS OF THE INSTITUTE.**—**BIBLIOGRAPHY.**

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MITTHEILUNGEN D. K. DEUT. ARCHÄOLOGISCHEN INSTITUTS. ATHENISCHE ABTHEILUNG. Vol. XV. 1890. No. 2.—**W. JUDEICH,** *Iasos* (pl. III; 7 cuts). The writer spent some days in company with Franz Winter at Iasos in the spring of 1887. The ruins of Asin Kalessi are on an island which is now united with the mainland by the action of the water.

On the highest point is a mediæval castle, at the entrance to the harbor a mediæval tower. The island is surrounded by well preserved ancient walls about 2800 m. in circuit counting the projections of the twelve square towers ; about 2400 m. in simple circuit. The walls rest upon the rock or the natural soil, and are built of well joined square blocks. The thickness of the walls is 2.50 m., consisting of two facings the space between which is filled with scraps of stone and mortar. In parts of the wall the facings are built with mortar, and the filling forms a conglomerate ; elsewhere there is no mortar between the blocks of the facing-walls. The wall on the N. side is ruined and shows traces of frequent changes. These walls belong to Hellenistic or not much earlier times. On the heights of the mainland west of the island are older fortifications of massive stone ; 3500 m. of these walls now remain. There are 18 towers, 68 gallery posts, and 117 windows but only one great gate. The forces of an attacking enemy would be necessarily much divided. This larger and older city on the mainland was doubtless the Iasos which paid a talent as tribute to Athens, while the smaller town on the island was the less important Iasos of the fourth century B. C. and later times. Four fragmentary inscriptions are published, all of Roman date.—J. H. MORDTMANN, *Epigraphy of Asia Minor*. 1. Inscription from Poemanenum. The inscription in honor of Herostatos son of Dorkalion, published by A. Sorlin Dorigny (*Rev. archéol.*, 1877, xxxiv, p. 106, No. 3) is republished from a copy by A. D. Mordtmann and discussed. 2. Εἰστρογή and kindred matters. Εἰστρογή occurs in *CIG*, iv, 9266, εἰστρογῆς *CIG*, iii, 3857^m (=Kaibel, *Græca Epigr. ex Lap.*, No. 367). The *ei* or *ε* is merely an accretion before *σ* to suit the convenience of Asiatic pronunciation. Other examples of the same phenomenon are given.—P. J. MEIER, *Gladiator-reliefs in the Museum at Trieste* (cut). This relief, after having been for some years in private hands at Rhodos, was presented to the museum by the Austro-Hungarian Lloyd. A *retiarius* is represented standing upon a raised platform. A *secutor* is trying to mount upon the platform. The left end of the relief (which measures 0.59 m. by 0.58 m.) is broken off, and the edges and front are somewhat injured. The inscriptions read Μάρικκος, [Ἀγορ]άκριτος, and ἀπελύθη ἔξω λούδον. The Latin word *ludus* seems here to be used in the sense of *munus* or better *pugna*, and occurs here for the first time in a Greek inscription.—W. DOERPFLD, *Metrological Notes*. v. The Aiginetan-Attic system of measures. A comparison of the dimensions given in the inscription recording the condition of the Erechtheion in 408/7 B. C. with the actual dimensions of the stones shows that the common Attic foot was at that time about 0.33 m. long. Further comparison of the dimensions of the Erechtheion, Parthenon, Theatre, Propylæia, Stoa of Eumenes, and the old temple of Athena show that this foot had a maximum length of 0.328 m. This foot was the one in common use in Attika. From this the

talent (the weight of a cubic foot of water) is found to be 35.3 kilogr. The Solonic foot is found to have been 0.296 m. long, and the Solonic talent weighed 25.9 kilogr., but this system of weights and measures was not in use for ordinary purposes until the second or first century B. C. The foot of 0.328 m. is the Aiginetan foot as is shown by comparison of measurements from Mantinea, Phigaleia, and Olympia. The Aiginetan (or Pheidonian) system was then as follows:—Linear measure, foot=0.328 m.; ell=0.492 m.; Square measure, *plethron*, 100 feet square=32.8 m. square=1076 square m.; Measure of contents, *metretes*=a cube of 0.328 m.=35.3 litr.; Weight, talent=weight of this cube of water=35.3 kilogr.—VI. The Greek stadion. A discussion of ancient authorities and comparison with measurements obtained from recent excavations, especially at Olympia, lead to the following result. There were six different stadia: 1. The Aiginetan-Attic or common Greek stadion of 500 ft. at 0.328 m.=164 m.; 2. The Olympic stadion of 600 ft. at 0.320 m.=192 m.; 3. The Græco-Roman stadion of 600 ft. at 0.296 m.=178 m.; $8\frac{1}{2}$ of these make a Roman mile; 4. The Roman stadium of 625 ft. at 0.296 m.=185 m.; 8 of these make a Roman mile; 5. The stadion of Philetairos, of 600 ft. at 0.333 m.=200 m.; $7\frac{1}{2}$ of these make a Roman mile; 6. The Ptolemaic stadion, of 600 ft. at 0.35 m.=210 m.; 7 of these make a Roman mile.—P. WOLTERS, *A Statue of a Warrior from Delos* (2 cuts). The statue represents a nude warrior who has sunk upon his right knee while his left leg is stretched out nearly straight behind. The head and left shoulder and left arm are gone, as are both feet, and the right arm from above the elbow. Beside the right knee lies a helmet. The statue is discussed *Bull. de corr. hellén.*, 1884, p. 178, 1889, p. 113 (photograph), and further published in Brunn's *Denkmäler Gr. und Röm. Sculptur*, No. 9. It is here shown that a base found at the same time as the statue with inscriptions pointing to the year 97 B. C. does not belong to it. The position of the figure shows that the warrior was in conflict with some one above him, probably a horseman. An inscription was found at Delos (*Monuments Grecs*, I, 8, p. 44; Löwy, *Inscripfen*, p. 110) belonging to a work by Sosikrates, son of Nikeratos, in honor of a victory of Philetairos over the Gauls. This Philetairos was probably the younger brother of Eumenes II of Pergamon, and the victory in question is assigned to the year B. C. 171 (Homolle) or 183 (Thrämer). The statue here discussed may well have belonged to this work. The differences between this figure and the Borghese Warrior are discussed. The treatment of the Borghese Warrior is much drier and harder, though both figures show the same mastery of anatomy in similar postures.—R. HEBERDEY, *Reliefs from Thessaly* (pls. IV–VII; 3 cuts). Nine reliefs are published, two of which have been previously known from squeezes. Two of the nine are in Larissa; one which has only an inscription (*Mith. Athen.*, XI, p. 50, No. 15), two rosettes and

a taenia painted red and white, is in Volo, the rest in Tyrnavo, a village about 3 hours from Larissa. All are sepulchral reliefs: one represents a spinner (only the head and the distaff are preserved); one a seated female figure with a dog; one a youthful male head; two a youth standing beside a horse (in both only the lower part is preserved); one a bearded man in a chiton; one a man holding a bird in his hand, which a child standing before him is trying to reach, and one a woman holding a child in her lap while a man in a broad hat and chiton holds out a bird to the child. These reliefs all belong to one school of archaic sculpture, though not to the same stage of development. All the faces are strong in their lower parts; the figures stand with the whole sole of the foot on the ground; the hair is smooth, and the treatment of the drapery is peculiar. There is but little plastic modelling, and color is freely used, the chief weight being laid upon drawing, not upon modelling. These Thessalian works belong to a school of their own. The relief in Venice, *Antike Denkmäler*, I, pl. 33, 2, is cited as an example of a more developed work of their school.—**MISCELLANIES.**—H. SCHLIEMANN, *Inscriptions from Ilion*. Two inscriptions for statues of Tiberius. In one he is said to have the tribunician power (δημαρχική ἐξουσία) for the twelfth time, in the other for the thirteenth time and the consulship for the fifth. Three other fragmentary inscriptions are of Hellenistic times, and a few letters on a fragment of black varnished pottery are assigned to the sixth century B. C. at latest.—A. WILHELM, *Psephism for the Comic Poet Amphis*. The psephism (Ἀθήναιον, II, p. 131 f.) of the year 332/1 B. C., published by Kumanudis, is supplemented by another fragment now in the Varvakeion. The psephism was passed in the ἐκκλησία ἐν Διονύσειον, and Amphis is to be crowned with a wreath of ivy. These are two additional reasons for believing that this Amphis is the comic poet.—A. THUMB, *Inscription from Megaris*. A fragmentary inscription (apparently dedicatory) of imperial times.—P. WOLTERS, *Old-Attic gravestone*. Two fragmentary inscriptions in early Attic characters, on the opposite sides of a block of Pentellic marble found in Athens, are read: (a), Στήλη [εἰμὶ Φ]ανο[μάχων Ἀ]ριστο[μάχων]; (b), [Στήλη] εἰμὶ [. . . φῶ]ντος [Ἀριστ]ομάχων. The inscriptions were probably read vertically.—**LITERATURE.**—**DISCOVERIES.**

No. 3.—E. SZANTO, *Contributions to the History of the Greek Alphabet*. The sign X or + = χ occurs in the Eastern group of alphabets, while Y = ψ. In the Western group X = ξ and Y = χ. The earliest alphabet possesses neither of these signs: KH = χ, KM = ξ, ΓH = φ, and ΓM = ψ. Then, upon the introduction of new characters, XH = χ, Xξ = ξ, ΦH = φ, and φξ = ψ. Here are four double signs for sounds that were conceived as single. The next step was to make the signs single or simple. In the East the H of XH and ΦH was dropped, giving X = χ and Φ = φ. Then for φξ the

new sign Υ was made from Φ , and for $X\Xi$ *samech* was introduced. In the West the Ξ of $X\Xi$ was dropped, giving $X = \xi$, while the H of ΦH was dropped in the East, giving $\Phi = \phi$. Then, when a single letter for the sound χ was wanted, the sign Υ was borrowed.—E. BETHE, *Aktaion* (pl. VIII). A black-figured Boiotian *pyxis* in Athens is published. The painting is careless, though white and red colors are used. The central scene is the washing of the body of a dead man by two women, while a third and fourth hold a taenia and an alabastrum. At the left are seen three dogs upon a hill, beyond which is Artemis going away and looking back. From the right come two old men. The presence of Artemis and the dogs indicates that the dead man is Aktaion, though he shows no trace of metamorphosis.—E. BETHE, *On Alabastra with Representations of Negroes* (cut). A plate from Tarentum is published. The ground is white with a dark border. On the white ground is represented a negro walking toward the left, though his body is drawn as if from the front. He wears trousers striped and spotted, and a sleeved tunic with a belt and broad stripes across the breast and down the sleeves. At each side of this figure stands *καλός* in Attic letters. The plate belongs to the fifth century B. C. and is in every way similar to the alabastra discussed by Winnefeld (*Mith. Ath.*, XIV, p. 41 ff). The representations of negroes on alabastra cannot, then, have served as trade marks for Egyptian oil, but they show the interest of the Athenians of the fifth century in the inhabitants of Egypt.—P. WOLTERS, *Melian Cultus-statues* (2 cuts). Two late and rude reliefs cut upon drums of columns and found in Melos in 1861. The first represents the Tyche of Melos standing under an arch supported by two Ionic columns. She wears a long chiton and cloak, has a low polos on her head, and carries a child (Ploutos) upon her left arm, while her right elbow rests upon a low column. In the arch is the inscription Ἀγαθὴ Τύχη Μήλων εἰλεως Ἀλεξάνδρῳ κτίστη εἰερῶν μυστῶν. The second relief, already published by Jahn (*de antiquissimis Minervae simulacris Atticis*, pl. 3, 7), and in Roscher's *Lexicon der Mythol.*, I, p. 690, is here given more accurately. Athena is represented holding shield and spear and wearing a helmet. A large serpent is by her feet at the right, an owl at the left. Serpents project from her skirt. The inscription reads εἰσεω Ἀλέξανδρον on the base of the figure, and the puzzling word εἰσεω occurs also on the front of Athena's robe. The two reliefs were evidently intended to match, and represent the two chief deities of the island. Since Melos was a colony of Sparta, this Athena relief, as well as Melian coins, can be used for a reconstruction of the Athena Chalkioikos at Sparta by Gitiadas.—W. JUDEICH, *Inscriptions from Caria*. Thirty-three inscriptions from Bargylia, Halikarnassos, Herakleia on the Latmos, Laodikeia on the Lykos, Mylasa and Nysa, copied by W. Judeich, F. Winter, and E. Fabricius. They are chiefly sepulchral or dedicatory

and of late date. No. 7 is a new publication of *CIG* II. 3800 (= *Annali*, 1852, p. 138 f.; Hicks, *Manual*, No. 193, and elsewhere). No. 16 is a fragment of a treaty between Mylasa and Knosos in Crete, and belongs with the fragments LeBas-Wadd., *Asie Mineure*, 380-384, *Bull. de corr. hellén.*, XII, 8 ff., Baunack, *Studien*, I, 1, p. 7. No. 18 is a record of a survey of some land. No. 20 contains a decree of the phyle of Ὑαρβεσνταί at Mylasa requiring that everyone who is honored by the phyle make an offering to the god of the phyle, Zeus, of one silver cup if he be himself a member of the phyle, of three if he be not. The officers of the phyle are ταμίαι, οἰκονόμοι, δικασταί, νομοφύλαξ, and ἄρχων. This inscription appears to belong to the first century B. C. No. 21 is a record of lease or purchase of temple lands.—A. WILHELM, *Inscriptions from Thessaly*. Forty-seven inscriptions, nearly all from Volo. The first seven are honorary decrees, No. 4 of Demetrias, the rest of the league of the Magnesites. Nos. 8-16 are dedicatory inscriptions. Nos. 17-20 are records of emancipation. Nos. 21-45 are sepulchral, No. 46 is dedicatory, No. 47 a list of names in Tyrnavo.—B. STAES, *The Tomb in Vourva* (pls. IX-XIII; 4 cuts). This tomb or mound held seven graves. Some of these existed before the erection of the mound, while some were afterwards dug in the mound. Beside one of the earliest tombs a trench lined with brick was found, and in it a shallow dish and an oinochoe. A similar trench was found on the outside of the mound, also containing fragments of vases. These trenches were for the reception of sacrificial offerings. Seven vases are published. All belong to early Attic art, between the "Dipylon vases" and the black-figured vases. The influence of the Corinthian style is very marked. The adornment consists of animals (birds, lions, boars, deer, sphinxes, and sirens), lotos pattern, rosettes, and rays. The front of one vase has a representation of a man and woman reclining on a couch, attended by slaves, two bearing cups and one with a double flute. On a chair at one side sits a female figure, and before her on a stool a small boy. Under the chair is an animal. The back of this vase has four forms in rapid motion, but these are much defaced. This vase brings us into the class of black-figured vases. It was found in the trench on the outside of the tomb. The earlier vases found within the tomb belong apparently to the seventh century B. C., so that the erection of the tomb took place at some time between the seventh century and the time of Solon.—A. E. KONTOLEON, *Epigraphica*. Seven numbers. No. 1 from Magnesia on the Maiandros. The Magnesians sent to ask the god for advice because a plane-tree had been blown down and had fallen in the precinct of Dionysos. The oracle (in hexameters) commanded them to bring three Mainades from Thebes: Kosmo, Baubo, and Thettale were brought and instituted three *thiasoi*. They afterwards died and were buried by the Magnesians. A second inscription on the base of

the slab containing the oracle informs us that Apolloneios Mokalles wrote and dedicated (to Dionysos) the inscription. No. 2, from Philadelphia, is dedicatory. No. 3, from Kedreai, gives three inscriptions, an honorary decree of the Kedreatai (*Bull. de corr. hellén.*, x, p. 426, with an addition) and two sepulchral inscriptions. No. 4 from Καλβιανὸν πεδίων reads Κολορνῶν. No. 5, from Omourlo beyond Aidin, reads

ANFF||CCCORNELIORVM|FVPORIETPHAR|NACIS·DC·PLO|

No. 6, from Mt. Sipylus, reads ὄρος Σικαμινού. No. 7, from Tralleis, contains letters of an alphabet not Greek.—MISCELLANIES. W. JUDEICH, *Two Early Ionic grave-stelai*. No. 1 is a facsimile of the inscription of Hekataie, wife of Aristokles, published Μουσείον καὶ βιβλιοθήκη τῆς εὐαγγελικῆς σχολῆς, III, 1880, p. 148, and Röhl, *I. G. Ant.*, No. 494. No. 2 is a facsimile of the inscription of Tychie, wife of Kleon, published *Arch. Anz.*, 1889, p. 86.—LITERATURE.—DISCOVERIES.

No. 4.—P. WOLTERS, B. GRAEF, and E. SZANTO, *The Sanctuary of the Kabeiroi near Thebes* (pp. 355–419; pls. I–XIV; 9 cuts,—continued from vol. XIII, p. 427). IV. *The Terracottas* (Wolters). Thousands of terracottas were found without special local characteristics, and mostly of early, not fine work, only a few being of the Tanagraean sort. The most numerous are figures of animals, chiefly of the fifth century B. C. Only a few are formed entirely by hand, the vast majority being pressed in a mould. Bulls are the most numerous (about 600 of the smallest sort); next came sheep (about 250); then swine (over 200); then goats, lions, dogs, birds and hares, a fox and a fish. Some of these figures belonged to groups. Monster horsemen also occur. About 50 specimens of the well-known type of a man reclining at a banquet were found. Sometimes the man is bearded, sometimes youthful. About 70 Seilenoi, some 25 Pans with goat's legs, about 20 ithyphallic bearded Hermai, and many figures of standing youths are mentioned, besides one Herakles, one Hermes Kriophoros, a variety of athlete and similar figures, some representations of children, a few heads and masks, parts of about 30 women, a few caricatures, several jointed dolls, and a few fruits. Nearly all these are of careless workmanship and adorned with color. V. *Objects of Bronze and Lead* (Graef). A bronze statuette (0.19 m. high) of a diskos-thrower, of careful workmanship in the Aiginetan style, heads the list. The rest are chiefly animals (201 of bronze, 331 of lead). By far the greatest number are bulls. There are three bronze goats, seven lead goats and eight lead rams. These are of coarse workmanship, most of them cast in a mould, though some (especially of lead) are made by hammering the solid metal. Though all are coarsely made, development is distinctly traceable. Three bronze bulls bear the inscription Δαιμόνδας ἀνέθεκε (one adds τοῖς καβίροις). One hollow recumbent goat, the base of which is lost,

shows traces of gilding. These objects have no characteristics from which their date can be determined. To these figures a number of utensils must be added. VI. *Various objects* (Wolters). Iron objects are knife-blades, nails, fragments of plates, etc., a hook for a shepherd's staff, and a small double axe. The fragments of marble sculpture are unimportant; the only large piece is a headless Roman draped figure. A number of stone whorls and astragaloi (one of amber) are mentioned. Bone objects are astragaloi, knuckle bones, and *stili* for writing. Glass beads of various colors and small glass heads, etc., are described. VII. *Inscriptions* (Szanto).

1. Inscriptions upon stone. These are 12 in number. No. 1, under the heading *Καβiriάρχη*, gives four names; under that of *Παραγωγείες*, twelve names (published *Δελτ.* 'Αρχαιολ., 1888, p. 16; *Berliner philol. Wochenschr.*, 1888, p. 579), and is assigned to the third century B. C. No. 2 (about 200 B. C.) gives a list of anathemata for three years. The archon, Kabiriarchs, and clerk change every year, but the priests remain the same. One priest, the Theban *Σαμίας Ἰσμενικέταο*, occurs in the Orchomenian inscription (Larfeld, 15) and in the Plataian inscription (*ibid.*, 273). No. 3 records that in a certain year (part of the date is gone, but *Σαμίας Ἰσμενικέτου* occurs as priest though with a new colleague) the Thebans dedicated the *δύτη*, though what that is remains unexplained. This inscription is not like Nos. 1 and 2 in Boiotian dialect. The remaining nine inscriptions are mere dedications, except Nos. 4 and 5 which are fragments of accounts.

2. Bronze inscriptions. Of these there are 23, all mere dedications (usually *ὁ δέωνος Καβίρω*). Most of these belong to the first half of the fifth century B. C., while a few are later.

3. Inscriptions on vases. Of these 110 facsimiles are given. The inscriptions are almost without exceptions simple dedications to the Kabeiros or the *Παῖς* (26 to the latter). A very small number are in the Ionic alphabet, the rest in Boiotian characters. Theta occurs with a cross and with a dot in the middle. The latter form cannot be considered earlier than the middle of the fifth century B. C. Two inscriptions read from right to left, and two are *βονστροφῆδόν*. In general, the date of these (mostly carelessly written) inscriptions is from the end of the sixth to the first quarter of the fourth century B. C.

—W. DÖRPFELD, *The old Athena-temple on the Akropolis*. H. G. Lolling published (*Δελτίον*, 1890, p. 29, and *Ἀθηνᾶ*, 1890, p. 627) an inscription of the sixth century B. C. found in fragments on the Akropolis. This inscription, part of which is here republished, gives rules for the conduct of *ταμίαι*, priests, etc., and mentions the *ἐκατόμπεδον*, the *προνέιον*, the *νεός*, the *οἶκεμα ταμείων* and *τὰ οἰκέματα*. The *ἐκατόμπεδον* is evidently the old temple of Athena, and the apartments mentioned are parts of that temple. After the Persian wars the old temple was restored and is called by the name of *ἀρχαῖος νεός* and *παλαιὸς νεός*, at least in some inscriptions.

The writer maintains against Lolling that both the names *ἐκατόμπεδον* and *ἐκατόμπεδος νεός* do not mean the old temple after the erection of the Parthenon, but that the *πρόνεως*, the *ἐκατόμπεδος νεός* and the *παρθενών* denote the parts of the Parthenon. The *ἐκατόμπεδος νεός* is the great cella of the Parthenon. The opisthodomos mentioned in inscriptions is the opisthodomos of the old temple, not (as Lolling maintains) that of the Parthenon, for the opisthodomos of the Parthenon was the *παρθενών*. Lolling thinks the old temple was removed in the fourth century B. C. or soon after. The writer, on the contrary, maintains that it remained standing and that Pausanias (i. 24, 3) mentions it as the temple of Athena Ergane, but that his description of it is lost.—MISCELLANIES.—W. R. PATON, *Note on Vol. XV, p. 335*. A more correct copy of an inscription from Kedreai published by Kontoleon is given, and an inscription from the same place in honor of Vespasian is added, together with corrections of the inscriptions published by Diehl and Cousin, *Bull. de Corr. hellén.*, x, p. 424, No. 2, and p. 430, No. 7.—LITERATURE.—DISCOVERIES.

Vol. XVI. 1891. No. 1.—O. KERN, *Eubuleus and Triptolemos* (pls. I, II; 4 cuts). Eubuleus is shown, by investigation of Orphic fragments and other literary remains, to be an epithet of Zeus. A youthful Eubuleus is therefore impossible. The so-called Eubuleus head found at Eleusis represents Triptolemos, as comparison with other works of art shows. The head may belong to the time of Praxiteles, but can hardly be by him, and is probably not an original. Fragments of two similar heads have been found at Eleusis, one of which is published.—E. SZANTO, *The system of Courts of the Athenian Allies*. A discussion of the *σύμβολα* of the Athenian allies, with restorations of the Amorgos inscription, *Bull. de Corr. hellén.*, XII, p. 230, and the Naxos inscription, *Ἀθήναιον*, VII, p. 95. All suits involving 100 drachmas or more were to be tried in Athenian courts, and others might be. The second Athenian empire was built up in great part by means of these courts.—P. WOLTERS, *Marble Head from Amorgos* (25 cuts). A rude stone head from Amorgos, with traces of color, is published. Some of the color represents tattooing or face-painting. Other primitive objects from graves at Amorgos are compared with similar ones found near Sparta, in Kythera, Euboia, and Attika. This early crude art was, then, not confined to the Cyclades.—B. SAUER, *Investigations concerning the Pediment Groups of the Parthenon* (pl. III; 5 cuts). The present condition of the pediments is described, and the position of the figures is determined by the marks of their bases, the holes for clamps and supports, the marks of weathering and similar indications. In the western pediment Athena and Poseidon occupied the centre, with the olive tree of modest size between them. At each side was a two-horse chariot. Under the horses

of Athena's chariot was probably a serpent. The figure S (Michaelis) was masculine, and therefore not Aphrodite. The Venice fragment (Waldstein, *Arch. Zig.*, 1880, pl. vii; *Essays on the Art of Pheidias*, pl. v) cannot belong to either pediment. In the eastern pediment the central group consisted of Zeus seated in profile, Athena standing, Hephaistos, and a fourth figure. At each side were seated deities. The chariot of Selene had four horses. The symmetry, and at the same time the variety, of the arrangement of the figures is remarked upon.—F. HILLER VON GAERTRINGEN and TH. MOMMSEN, *The Monument of Chairemon of Nysa*. An inscription from Nysa, now in Aktsche, a village on the railway from Smyrna to Aidin is published. The first part of the inscription is mutilated, but the name of Γάιος Κάσιος can be made out. Then follow two letters from King Mithradates to his satrap Leonippos, setting a price upon the heads of Chairemon, son of Pythodoros, of Nysa, and his sons Pythodoros and Pythion, because of aid and comfort furnished by them to the Romans. This must have been in the beginning of the war of 88 B. C. Other members of the family of Chairemon were well known in later times.—S. SELIVANOV, *Inedited Rhodian Inscriptions* (cut; 4 facsimiles). Six inscriptions. No. 1, in archaic Ionic letters, ascribed to the early fifth century B. C., is a sepulchral inscription, containing the new names Σαώλας and Ἀπολλωμίδας. No. 2, a sepulchral inscription, in letters of the western class ascribed to the sixth century B. C., contains the new names Εὐθυτίδα, Ὑφαγος, and Ὑφυλίδας. No. 3, in archaic Ionic letters, is ascribed to the seventh century B. C. The words Ἰδαμενέως and εῖ have initial digamma, in form like a zeta (I). The inscription consists of two hexameters in a mixture of Doric and Ionic dialect. Remarks on the alphabets of Rhodes are added. Nos. 4–6 are later fragmentary inscriptions; No. 4 contains the signature of an artist Epicharmos, No. 5 that of Pythokritos. In No. 6 the word *θυγατροποία* is commented upon.—F. DÜMMLER, *Inscription from Itanos* (facsimile). The inscription *Museo italiano di antichità classica*, II, p. 671 f., is discussed and restored. It is a prayer to Zeus and Athena for the welfare of Itanos.—A. WILHELM, *Inscriptions from Lesbos*. Five late inscriptions. Two are honorary, one dedicatory, one on a boundary stone, and one a mere fragment.—A. E. KONTOLEON, *Aphrodite Stratonikis*. Two inscriptions found near Smyrna. They were intended to mark the τέμενος of Aphrodite Stratonikis. By their aid C. I. G. 3156 (here republished) is properly restored.—LITERATURE, including the publication of an inscription from near Kula in Asia Minor (Ἀμάλθεια, 1890, No. 4622 [Smyrna 5/24, July, 1890]).—DISCOVERIES. A general account of discoveries (W. D[örpfeld]) is followed by the publication of a fragmentary dedication to Poseidon from Laconia, three in-

scriptions from Kyzikos, one of which is a decree in honor of Queen Antonia Tryphaina of Pontos, two inscriptions from Laodikeia *ad Lycum*, four from Apameia in Phrygia, one from Omarbeili, between Magnesia and Tralleis, and one from Kalamaki, near Patara in Lykia. These are all of Roman times and written in Greek. They are chiefly honorary and dedicatory.—REPORTS OF MEETINGS, ETC. HAROLD N. FOWLER.

REVUE ARCHÉOLOGIQUE. 1890. Jan.-Feb.—M. DELOCHE, *Studies on some seals and rings of the Merovingian period* (contin.). Eight rings are described, one engraved with a fantastic animal, two with reptiles, two with crosses, one with indefinite signs and two with points enclosed in circles.—M. DE VOGÜÉ and A. L. DELATRE, *The Carthaginian Nekropolis of Byrsa* (pl. i). See *News, AJA*, v, 481.—CARTON, *The Pagan Nekropoleis of Bulla Regia* (pl. ii). The excavations begun in 1888 were continued in 1889. Two necropoleis were investigated: one, the larger, west of the city, the other, a smaller one, to the east. The sepulchral monuments consisted of (1) blocks of stone in the form of a quadrilateral prism surmounted by a hemicylinder, (2) *stelai*, (3) *cippi*. The ornamental emblems show certain peculiarities not found in other parts of Africa. The sarcophagi either were constructed of tiles, or consisted of large *amphorae*. Some of the *mausolea* were *columbaria* with niches, others contained true sarcophagi. No Christian emblems, but a large number of pagan funerary objects, were discovered.—A. CASTAN, *Two Roman Epitaphs of women*, which belonged in the sepulchral avenue of Vesontio. One, dating from the time of the Antonines, celebrates the conjugal fidelity of Virginia, and is found on a sarcophagus erected by her husband and son; the other is on a sarcophagus to Caesonia Donata, erected by her husband.—J. CHAMONARD and L. COUVE, *Catalogue of painted vases in the Bellon collection* (conclusion). Three vases of the type of Lokroi, five *lekythoi* with white ground, six red-figured fifth-century vases, four small fourth-century Attic vases, five vases of the decadence, twelve vases of the type of Southern Italy, five vases with figured reliefs, and nine others, are here described.—C. LORET, *Researches on the Hydraulic Organ*. The studies of M. A. Terquem on Vitruvius (*La science romaine à l'époque d'Auguste*, Paris, 1885) corroborate the views of Loret published in the *Gazette Musicale* in 1878. The descriptions of the hydraulic organ given by Heron of Alexandria and by Vitruvius are here carefully compared, and various documents are presented showing that it continued to be used as late as the XII century.—F. DE MÉLY, *The relics of the milk of the Virgin and Galactite*.—G. BAPST, *The tomb of Saint Piat*. Saint Éloi erected a tomb to St. Piat in the church at Seclin. In the Norman invasion of 881, the body of St. Piat was transported to Chartres. Here its history may be traced

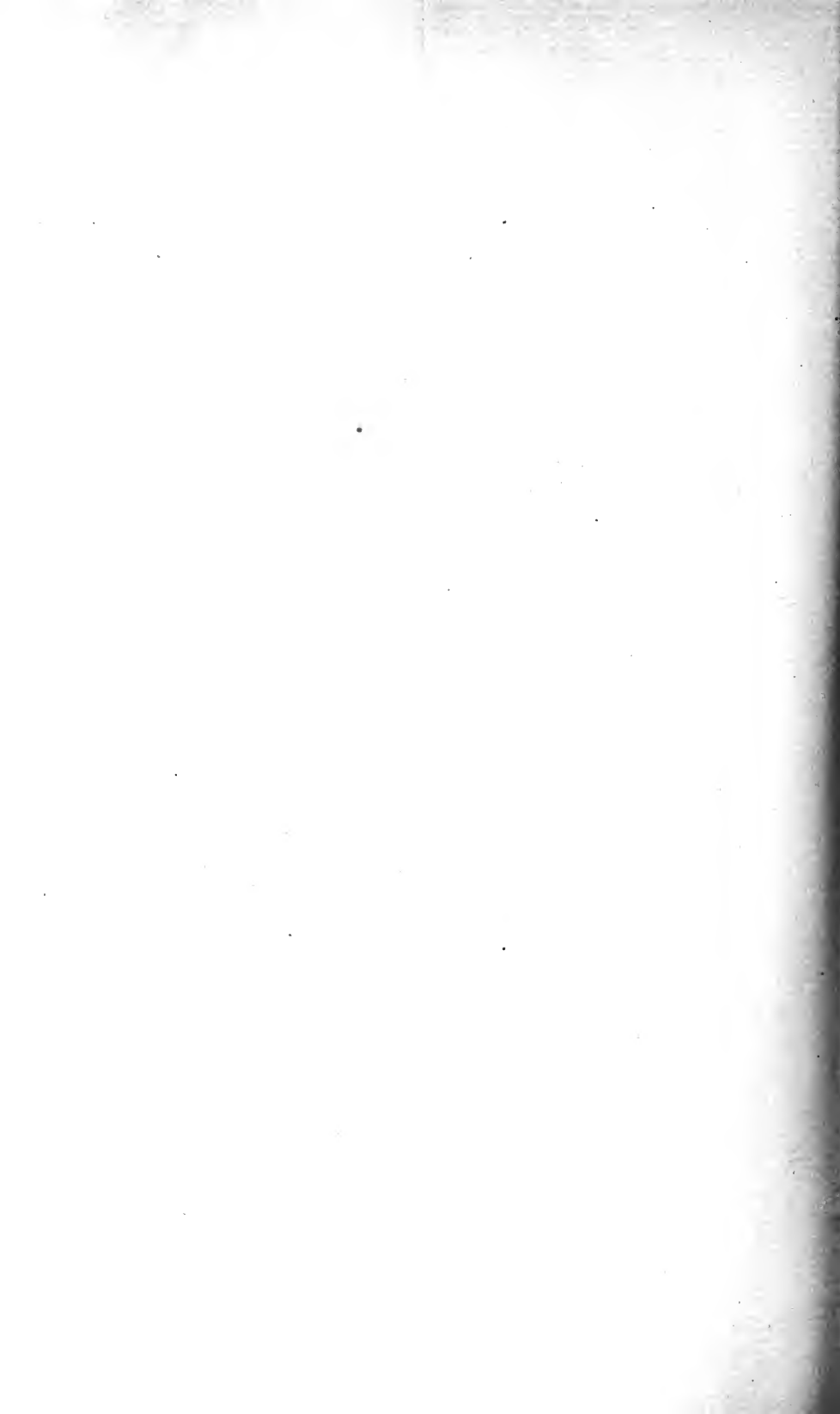
until transported to Paris in 1793.—**MISCELLANIES.**—*Monthly Bulletin of the Academy of Inscriptions.*—*Archæological News and Correspondence.*—**BIBLIOGRAPHY.**—R. CAGNAT, *Review of Epigraphic Publications relating to Roman Antiquity.*

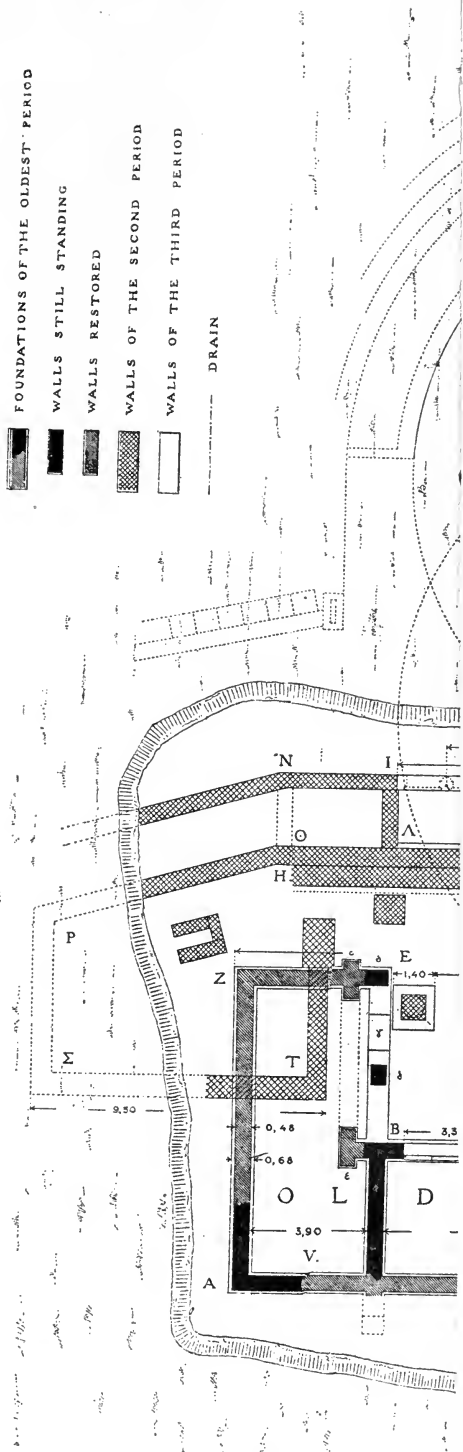
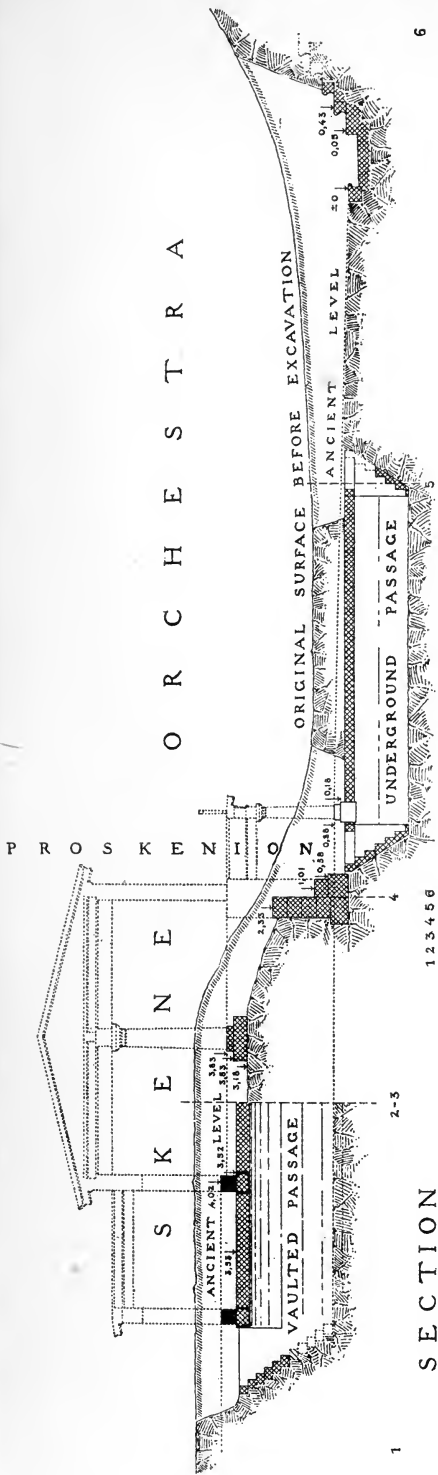
March-April.—L. HEUZEY, *An Asiatic tribe on the war-path* (pls. iv, v). See *News, AJA*, vi, 324.—ED. FLOUEST, *The Gallic god with the Mallet* (pls. vi, vii).—On an altar-pier figured on four faces (discovered at Mainz) are represented four divine couples. One seems to be Mars and Victoria, another Mercury and Rosmerta, and a third Diana accompanied by the god with a mallet. The latter seems to have been, amongst the Gauls, a divinity of the highest rank, the *Dis Pater*. Diana here preserves the Asiatic character of *Magna Mater*.—ST. GAIDOZ, *The Gallic god with the Mallet. The altars of Stuttgart*. The publication of the Mainz altar by M. Flouest has led M. Gaidoz to publish other similar monuments, two of which are in the Museum of Stuttgart. Gaidoz interprets the god with the mallet as Vulcan, Taranis, Thor or Donar: other similar monuments are found in the museums of Karlsruhe, Mannheim, Alsace and Trèves.—M. DELOCHE, *Studies on some Seals and Rings of the Merovingian period* (contin.). Rings of Janus, Theganus, Runa, two rings with the chrism, one with the barred S and one marked with the letters T and D, are here described.—C. HENRY, *Application of new instruments of precision to archæology, especially to the morphology of three types of amphoræ in antiquity*. A description of the author's *Cercle chromatique*, an instrument to assist in the analysis and measurement of color sensations and of his *Rapporteur esthétique*, an instrument to do the same for the sensations of form. An application of the latter to amphoræ from Knidos, Rhodos and Thasos is here given.—V. WAILLE, *Note on a Christian Basrelief found at Cherchell*. This relief is a rather rude example of fifth century A. D. work, representing the Adoration of the Magi, and the Children in the Fiery Furnace.—C. MAUSS, *Note on an Ancient Chapel in Jerusalem*. A careful study with plans indicating the history of the chapel of the Patriarchs, which adjoins the Hall of the Patriarchs and the church of the Holy Sepulchre at Jerusalem.—L. MOREL, *Tumulus of Diarville and Ambacourt*. Here were found bronze tongues, bracelets, anklets, an iron sword of the Hallstatt type and fragments of pottery.—F. DE VILLENOISY, *An archæological error in regard to ancient bronzes*. The idea that ancient bronze was produced by a mixture of nine parts copper to one of tin is an error of modern times, found first in the articles of Morlot which appeared from 1859 to 1863. An analysis of more than 400 bronze objects from various parts of Europe exhibits considerable variation in composition, and especially the usual presence of lead. Copper in its pure state seems to have been unknown until comparatively recent times.—S. REINACH, *Chronique d'Orient*. A

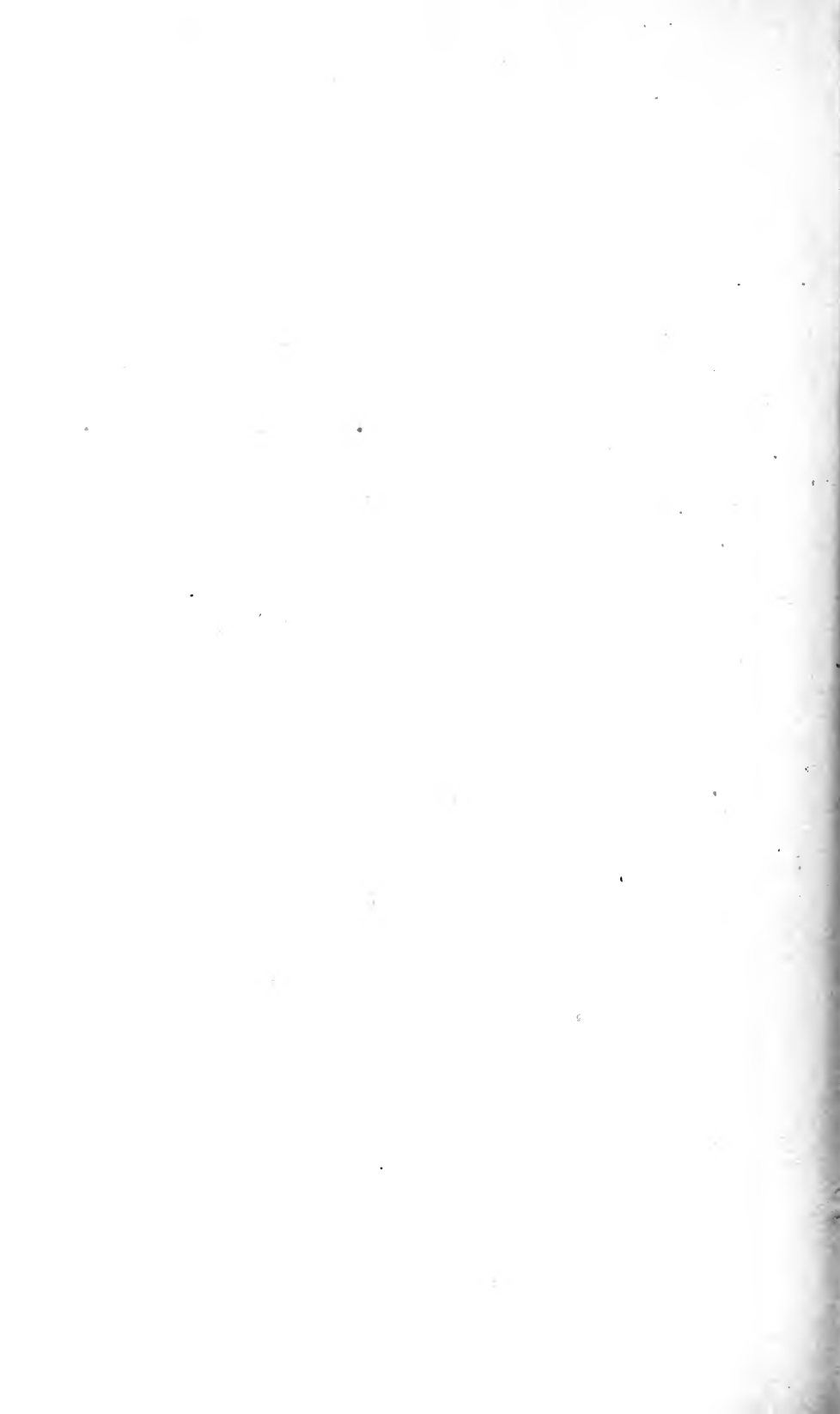
comprehensive resumé of Greek and Oriental news.—MONTHLY BULLETIN.—NEWS AND CORRESPONDENCE.—BIBLIOGRAPHY.—R. CAGNAT, *Epigraphic Publications relating to Roman Antiquity*.

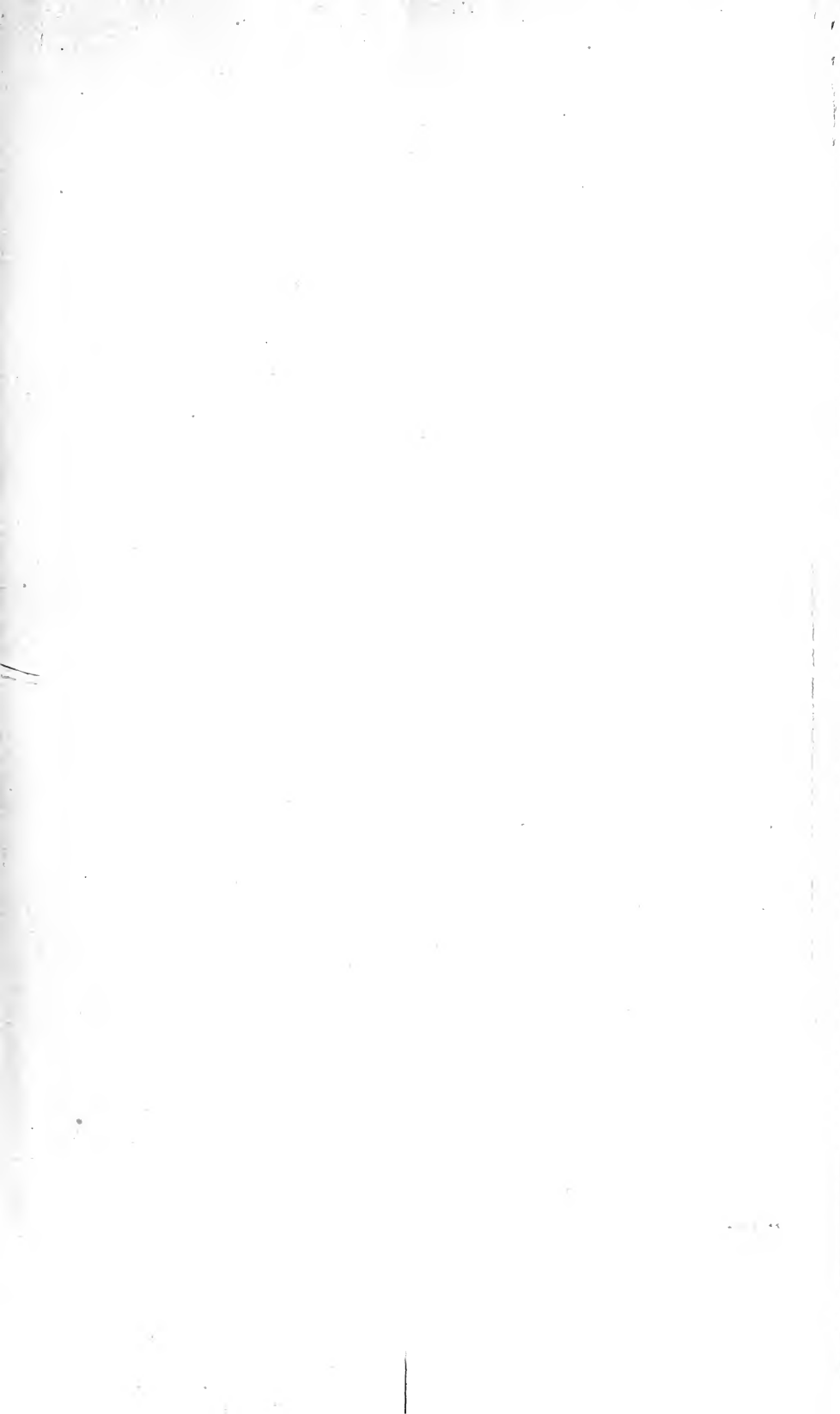
May-June.—M. DELOCHE, *Studies on some seals and rings of the Merovingian period* (contin.). Descriptions of rings of Nennius and Vadena, Eva, Elisa, Dana, and of rings inscribed with a helmet, forked cross, interlaced C's, serpent-heads, and unexplained monograms.—L. HEUZEY, *An Asiatic Tribe on the war-path* (second article). See *News, AJA*, VI, 324.—T. REINACH, *A Portrait of Pompey* (pl. VIII). A front view of the bust of Pompey, owned by M. Jacobson, of Copenhagen, the profile and three-quarters view of which were published by Helbig in the *Mittheilungen, Röm. Abth.*, I, pp. 37-41, pl. I.—J. A. BLANCHET, *A bronze representing a nation and conquered warriors* (pl. IX). This is a vase-handle on which is represented a seated woman (possibly a Gaul) and captives who cannot be defined more accurately than as barbarians.—J. DE BAYE, *The Nekropolis of Mouranka* (Russia). See *News, A. J. A.*, VI, 396-97.—E. TOULONZE, *A witness of antiquity at Lutetia. A Roman Rubbish-heap*. See *News, AJA*, VI, 391-92.—E. MÜNTZ, *Pope Urban V. Essay on the History of the Arts of Avignon in the XIV Century* (contin.). From documents in the Archives of the Vatican an account is given of the constructions of Urban V at Montpellier, of the various expenditures in this connection, and of the relative share of the various artists employed. A specially valuable document is the Inventory of the Pontifical Treasures made in 1369, which M. Müntz will publish separately. They formed a magnificent collection of the rarest works of art: jewelry, embroidery, ivory-sculpture, armor, candelabra, reliquaries, cups, plates, pitchers, crosses, rings, mitres, and all the accessories of ecclesiastical furniture.—R. MOWAT, *Inscriptions from the territory of the Lingones preserved at Dijon and at Langres*. Of the inscriptions from monuments of a public character, one contains the name of Vespasian: IMP|CAESA|RVESP|ASIAN. Three are mile-stones and a fifth contains the name of the town *Vertikius*, which still survives in the modern form Vertault. Twenty-six are funerary inscriptions and one is from an altar.—MONTHLY BULLETIN.—NEWS AND CORRESPONDENCE.—BIBLIOGRAPHY.

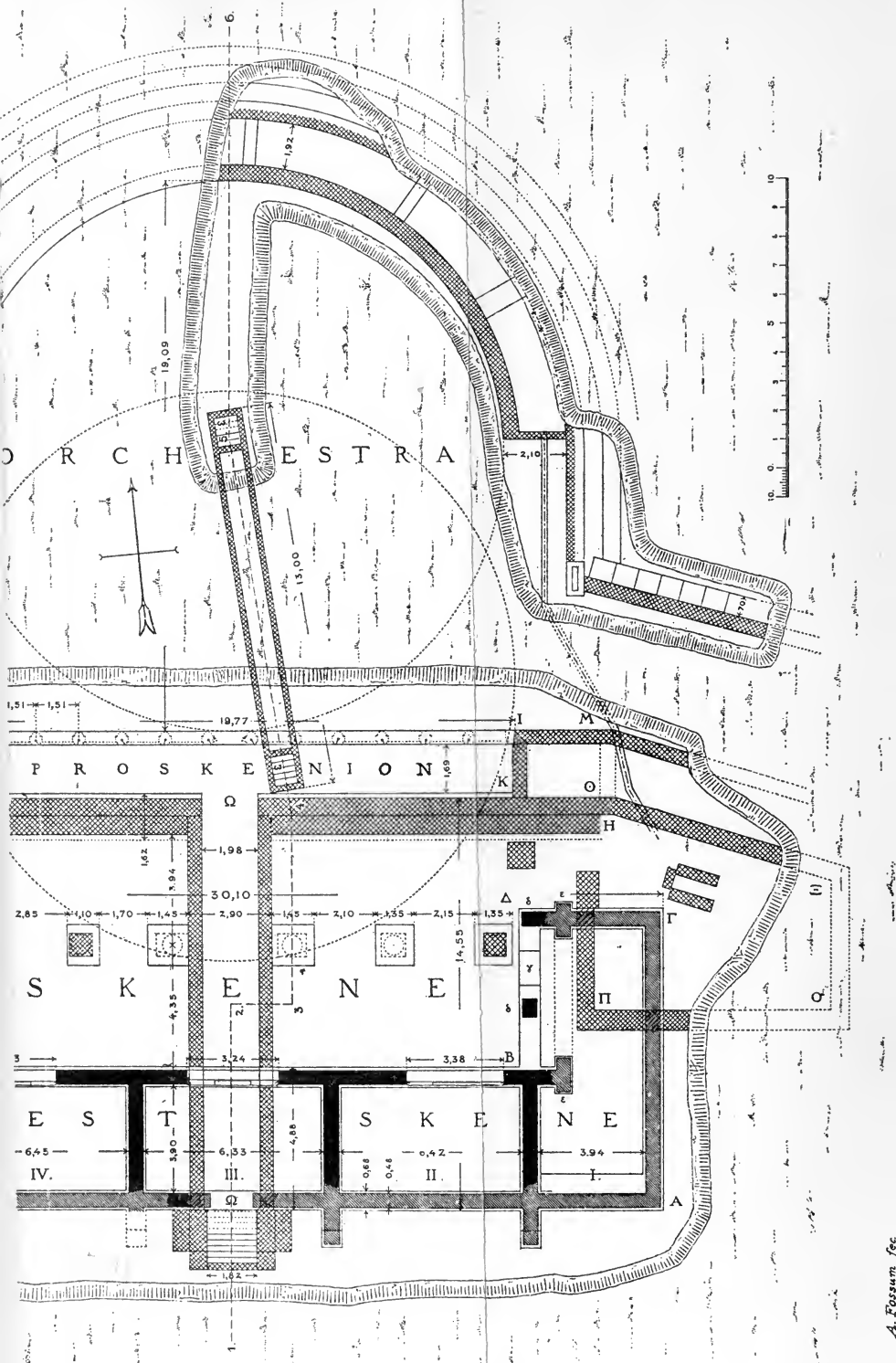
ALLAN MARQUAND.











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PAPERS OF THE AMERICAN SCHOOL OF CLASSICAL
STUDIES AT ATHENS.

EXCAVATIONS BY THE SCHOOL AT ERETRIA, 1891.

[PLAN, PLATE XI.]

INTRODUCTORY NOTE.

A preliminary and summary account of the results of the excavations at Eretria in Eubœia, carried on during the spring of 1891 by the American School of Classical Studies at Athens under my direction, was sent for publication to the Committee of the School, at the close of the excavations, embodied in my Report to the Committee for 1890-1891. The complete and authoritative account of our work at Eretria will contain several articles corresponding to the distribution of the work among the members of the expedition which I made at the beginning of excavation, and will probably be terminated in the course of the coming year. According to this organization, my colleague, Professor Richardson, of Dartmouth College, the Annual Director for the past year, undertook the department of epigraphy, together with a historical account of Eretria; Mr. Fossum, late of Johns Hopkins University, remained at Eretria during the whole period of excavation, displaying most intelligent perseverance in his work, and had charge of the excavation of the *skene* of the theatre; Mr. Brownson, of Yale University, had charge of the *cavea* of the theatre; Mr. Pickard of Dartmouth College, and Mr. Gilbert, of Brown University, were in charge of the survey of all the walls of the ancient city with a view to produce a topographical map of the district; Mr. Pick-

ard also made a careful topographical study of the locality, and, assisted by Messrs. Brownson and Fossum, did most of the levelling of the theatre. I undertook the excavation of graves in the neighborhood of Eretria, including that which has been called the Tomb of Aristotle, in addition to the general supervision of the work.

Besides the general advisability of delaying the publication of results until all the material has been collected and sifted, another cogent reason lies in the fact that the work at the theatre is not yet completed, and must be continued in the coming season. Even as regards the *skene*, some digging will still have to be done in the region of the *parodoi* and the walls marked $P\Sigma$ and $O\Xi$ on the PLAN (PLATE XI).

However, the important bearings of the theatre we have excavated upon fundamental questions of the Greek stage, and thus upon the nature of the performance of ancient Greek plays, are such that our work has already been introduced by both contending parties into the controversy now in progress. Dr. Dörpfeld (in the *Berliner Philologische Wochenschrift*), Messrs. E. A. Gardner and Loring, and Miss Sellers (in the *Athenæum*), have quoted the theatre of Eretria in support of their respective views. In a letter to the *Athenæum* (in July last) I pointed to the prematureness of any introduction of the theatre of Eretria for evidence on either side, and asked that we should be allowed to make an accurate publication of the facts we had established, before they were made the subject of inference and controversy. But, considering the exceptional importance of the *skene* of Eretria, together with the impatience manifested by the scientific world for the publication of our work, I have deemed it right to issue at once the papers of Professor Richardson and those of Messrs. Fossum and Brownson, together with the plan of the theatre so far as excavated.

In the publication of the ancient remains of the theatre it was my intention to avoid, as far as possible, for the present, the drawing of conclusions directly implying acceptance of the main views of either of the parties which now stand opposed in the hypothetical reconstruction of the Greek stage, and to limit our publication to the simple and exact statement of the facts we had brought to light. This reticence I thought called for, because, though what may be called the "orthodox" view of the Greek stage has had adequate exposition, the new views of Dr. Dörpfeld have not yet been supported by a full and systematic account of the numerous data collected by that eminent

archæologist in support of his theories. Pending this publication it did not appear to me wise for archæologists who had not access to all the material at the disposal of Dr. Dörpfeld either to accept his views unconditionally, or to oppose them.

Now, in Mr. Fossum's account it will readily be perceived that he leans strongly toward the support of Dr. Dörpfeld's views. But, I must state that, in the attribution of the very imperfect and confusing traces of walls and architectural members as they appeared during the excavation, as well as in the reconstruction of the theatre, both Mr. Fossum and I came to our opinions independently of Dr. Dörpfeld's theories. Considering the eager perseverance, however, with which Mr. Fossum has worked, as well as the maturity of observation and inference which he has acquired by study, I have decided to allow his paper, on the whole, to remain as he has written it. The definitive publication will have to stand over until the excavation is completed, so far as we propose to carry it. Meanwhile, the plan, as here published, is quite official. It is also our view that the theatre, as it now appears, represents probably three, and certainly two, successive stages in the history of the ancient structure.

Finally, I have much pleasure in adding that we already have, as an immediate consequence of the Eretrian excavations, another favorable result of excavation carried on by our School in this year. At the instigation of my predecessor, Professor Merriam, the excavation of the theatre of Sikyon, undertaken by the School during his term of office, was resumed, with particular reference to the underground passage leading to the centre of the orchestra. Mr. Kabbadias, the Ephor-General of Antiquities in Greece, having, with his usual readiness, granted the required permission, Dr. M. L. Earle, formerly a student of our School, and now instructor in Barnard College, New York, went to Greece during the summer, and, in spite of the heat and difficulty of digging in the hot season, continued the excavations in the theatre of Sikyon, with the important results contained in the paper which is appended to this report. When, in addition to the work at Eretria, we consider Mr. Washington's successful digging at Plataia, and add this latest achievement of Mr. Earle, we have every reason to call the last a very fruitful year of School work.

CHARLES WALDSTEIN.

August 26, 1891.

I. ERETRIA: HISTORICAL SKETCH.

The recent excavations at Eretria justify an attempt to make a picture as full as possible of the rise, the continuance, and the decay of that important city, with the help of scattered literary notices and of inferences from the somewhat impressive remains.

We find Eretria¹ existing at the time of the composition of the Catalogue of the Ships, the Domesday Book of Greece. It appears without epithet or description in *Iliad*, ii. 537. Perhaps not without some significance is it named second among the Eubœan cities, Chalkis being mentioned first. When it emerges into the light or rather into the twilight of history (Thouk. i. 15), it is engaged in disputing with Chalkis the right to the first place. The boldness with which it reached out and laid claim to the Lelantine Plain, which lay so much nearer to Chalkis, argues a long period of prosperity in which it had developed opulence and power. But it is idle to hope for more than here and there a suggestion, throwing a little light on that period. One such suggestion is found in Herod., v. 57, where it is said that the ancestors of Harmodios and Aristogeiton claimed to have come from Eretria originally, but that closer investigation led to the belief that they were Phœnicians, who, coming to Boiotia with Kadmos, settled at Tanagra. Any one who sails up the Euripos on a clear day will be impressed with the nearness of the plain around Tanagra to the shore of Euboia. Considering that waterways are bonds and not divisions, one may say that Tanagra and Eretria belong to the same great natural amphitheatre surrounded by mountains.² This close connection being realized, it seems probable in advance that any Phœnician immigration which reached Boiotia (and this is the only side of Boiotia open to Phœnician immigration) would have included also the Eubœan shore. The passage in Herodotos comes in to give almost a certainty to a reasonable conjecture. Both reports between which Herodotos felt bound to choose were very likely correct. We may put the Gephyræans down as Phœnicians from the region of Eretria and Tanagra.

¹ In spite of its maritime associations, the name, in view of other inland Eretrias and the variant *Ἀπορία* (STRABO, p. 447), means probably not "oar-town," but "plow-town." TOZER, *Geogr. of Greece*, p. 250.

² It is in fact one of the most striking signs of the humiliation of Boiotia that Athens reached across or around these mountain barriers and exercised a controlling influence in the affairs of Chalkis and Eretria.

If one seeks for corroborations of Phœnician occupation of Eretria, he finds among the several stories that Strabo has to tell of the origin of the city, one which is to the point. He says (p. 447) that the Arabians who came over with Kadmos (*Ἀραβες οἱ Κάδμω συνδιαβάντες*) stayed behind in Chalkis and Eretria. But perhaps it is an impertinence to hunt after scattered literary notices, when we have the facts of the presence of the murex along the Euripos (Arist., *Hist. An.*, v. 15) and the copper-industry of Chalkis. Wherever there were purple and copper, there were Phœnicians. We can hardly think of the Phœnicians as occupying Chalkis without including Eretria also. Here were harbor, plain, and acropolis, as at Corinth and Nauplia. We may, then, think of Phœnicians awakening here, as they did everywhere along the coasts that they touched, the ruder Hellenes to a new life.³ Accordingly Chalkis and Eretria developed early. While Athens and Sparta are still slumbering, these cities are founding colonies from Chalkidike to Cumæ. In the eighth century B. C. they had their blooming period. Miletos and Samos did not develop until a century later, and when they came to the front the Eubœan cities were already on the decline.⁴

It is impossible to trace with certainty anything of the Phœnician settlement at Eretria. Perhaps it was on the peninsula forming the east side of the present harbor. This peninsula was once longer and wider than at present. It is still about 600 ft. long and about 300 ft. wide at its widest part. The action of wind and wave both up and down the Euripos seems destined to wear it away entirely. Even now it is an island at some hours of the day. It contains numerous remains of walls of the Macedonian or the Roman period. What at first appeared to be traces of very old walls much disintegrated proved to be an illusion.

Strabo gives traditions of early settlements in Eretria from Attika and the Peloponnesos, which it is difficult to prove. The immigration from Elis, which is probably separate from that from Triphylia, he attempts to substantiate by appealing to the prevalence of the Elean rhotacism in Eretria.⁵ Perhaps the mixture of many races, Abantes,

³ DONDORFF, *Die Ioner auf Eubœa*, p. 29.

⁴ HOLM, *Lange Fehde*, in *Abhandlungen zu Ernst Curtius' 70tem Geburtstag*.

⁵ It is interesting that a Eubœan inscription, published in the *Ἐφημερίς Ἀρχαιο-λογική*, for 1872, containing the text of a treaty between Eretria and Histiaia, shows several instances of rhotacism, e. g., *δοῦραι*, *ἔ[ρχ]ουριν*, *παραβαίνωριν*. Others in *Ἐφημ. Ἀρχ.*, 1887, p. 82, *seq.*, and 1890, p. 195, *seq.*

Phoenicians, Ionians, and Æolians, gave to Eretria that alertness which marked it in a peculiar degree.

In the long period of prosperity before the Lelantine War, which made Chalkis and Eretria famous, a sad emerging into history, the two cities went hand in hand. This Curtius finds indicated by the name "Eubœic talent," supposing that had the cities been antagonistic the talent would have been named after one or the other of them.⁶ Perhaps they made a mistake in founding colonies conjointly or near together, as in Chalkidike.⁷ When the war broke out it is supposed to have been conducted with a bitterness⁸ which seems to have been born years before. It is not unlikely that colonial troubles had as much to do with the break as the rich plain between the two cities.⁹ The quarrel was fought out with the help of many allies on each side.¹⁰ The Greek world was divided into two hostile camps, a division which showed itself for centuries. Eretria was vanquished without losing her independence or her honorable standing. The two neighbor cities never tried conclusions again, and lived amicably, except when the questions connected with Athenian or Macedonian rule in later times threw them temporarily into hostile camps. Eretria, however, appears to have had a good understanding with Athens in the very period when, shortly before the Persian Wars, Chalkis was conquered by Athens and made an Athenian possession.

The date of the Lelantine War is shown by Curtius¹¹ to have been the middle of the eighth century B. C. Eretria had still nearly three centuries of history before its first destruction. It now abandoned that extensive scheme of colonization which, with its rivalries, must have been quite a drain upon its population, and now probably reached its maximum. To this time we may refer the stele in the temple of Artemis Amarysia,¹² the principal sanctuary of Eretria, standing about

⁶ *Hermes*, x, p. 223. ⁷ Eretria took as its field Athos and Pallene; STRABO, 447.

⁸ The curious compact mentioned in the corrupt passage in STRABO, p. 448, not to use weapons thrown from a distance (*μὴ χρῆσθαι τηλεβόλοις*), may refer to the heat of the struggle in which both parties wished to kill at close quarters, or to a desire to rule out what seemed to them contrary to proper procedure on the part of scientific warriors. PLUTARCH, *Thes.*, 5, and the passage there quoted from ARCHILOCHOS would favor the latter view.

⁹ E. CURTIUS, in *Hermes*, x, p. 219.

¹⁰ HOLM, *Lange Fehde; Thouk.*, I. 15.

¹¹ *Hermes*, x, p. 220.

¹² This title, which survives in the name of the Attic village Marousi (LEAKE, *Demi of Attica*, p. 41), was one under which the goddess was worshipped in Attika with no less zeal than at Eretria. PAUS., i. 31. 4.

a mile outside the walls, on which stele, according to Strabo, p. 448, was inscribed a record showing that the Eretrians used to make their great procession out to the temple with three thousand hoplites, six hundred cavalry and sixty chariots. To the same time also we may refer the Eretrian control over Andros, Tenos, Keos, and other islands.¹³ Then probably the Eretrians set up at Olympia the big bronze bull, the companion piece to the one dedicated by their friends the Kerkyræans.¹⁴

At the time of the famous wooing of Agariste, in the first half of the sixth century B. C., Eretria was, according to Herod., VI. 127, in its bloom (*ἀνθείσης τοῦτον τὸν χρόνον*). That Eretria alone of all Greece shared with Athens the attempt to aid the Ionians in their revolt against Darius (Herod., v. 99), speaks well for its prosperity and its spirit. Two things we must not forget in connection with this expedition: first, that it was on Eretria's part the payment of a debt to Miletos for services rendered in the Lelantine War;¹⁵ secondly, that Eretria was in such intimate relations with Athens as to give some color to the story mentioned by Strabo, that Eretria was colonized from an Attic Eretria.

We are not likely to forget the consequences to Eretria of this assistance rendered to the Ionians. In the year 490 B. C., when the opportunity at last came for fulfilling his vow against the Athenians, Darius was not in such haste to take vengeance on these principal abettors of the revolted Ionians, now subdued, that he could forget the Eretrians. On them first fell the blow. The story is told briefly and graphically by Herodotos (VI. 100). In her hour of need Eretria stood alone, with divided counsels and traitors in her walls besides. She did ask Athens for help, and, if we may believe Herodotos, Athens acted not ungenerously. It could hardly be expected that the main body of Athenian troops should go over to Eubœia to meet the Persians. That would have been to give Athens to the Persians on the chance of saving Eretria. But Athens assigned to Eretria the four thousand Athenian *kleruchs* of Chalkis. These, however, did not stay. Before it came to an actual conflict they were off to Oropos, which is the last

¹³ STRABO, p. 448.

¹⁴ PAUS., v. 27. 9.

¹⁵ This Ionian revolt was Miletos' affair. It is noteworthy that the Samians, the enemies of Miletos and Eretria in the Lelantine War, ruined the Ionian cause by deserting almost in a body to the Persians in the naval battle on which all was staked. HEROD., VI. 14.

we hear of them. They do not appear to have done service either at Marathon or before Athens.¹⁶

Left alone, the Eretrians voted down the suggestion of retiring to the mountains, and, deciding not to risk an engagement in the open, retired within their walls and defended themselves for six days, incurring and inflicting great losses. On the seventh day, two traitors, Euphorbos and Philagros, betrayed the city to the Persians, who destroyed the temples and enslaved all the inhabitants, who, after witnessing the discomfiture of the Persians at Marathon from an island near by, were taken away on the Persian fleet and settled in the heart of the Persian dominion.

Yet Eretria did not lose its corporate existence, for ten years later its seven ships appear in the lists of the Greeks who fought at Artemision and Salamis.¹⁷ At Plataia also it furnished with Styra (which was probably an insignificant appendage, as it sent only two ships to the Greek fleet; Herod., VII. 1) a contingent of six hundred men drawn up in line next to the four hundred Chalkidians.¹⁸ Its name was carved on the tripod-standard of serpents, set up at Delphi, that roll of honor of the victorious Greeks. It is still "plain for all folks to see," on the fourth inscribed coil, reckoning from the bottom. Probably there were refugees enough to form a nucleus of a city immediately after the withdrawal of the Persians from Marathon.¹⁹ Herodotos does not say that anything was destroyed except its temples. Greek dwellings, for that matter, if destroyed, were soon replaced. Whatever walls then existed could not easily have been overthrown. A gate or two might have been broken down, but the Persians surely had no time and probably no tools to wreck such walls as those the remains of which are now to be seen on the acropolis of Eretria. They waited only *ὀλίγας ἡμέρας*, and then went on to Marathon.

¹⁶ WECKLEIN, *Tradition der Perserkriege*, p. 39, supposes that Herodotos has here, as usual, colored his narrative in the interest of the Athenians, in inserting the story of an Eretrian, Aischines, sending word to the Athenian allies that traitors were going to give Eretria to the Persians, and that it was time to act on the principle *saave qui peut*. The fear of "the men clad in the Persian garb" was probably still strong enough to induce these allies to get across to Oropos as soon as possible without being sent away.

¹⁷ HEROD., VIII. 1 and 46.

¹⁸ HEROD., IX. 28, 31.

¹⁹ Considering the great talk of taking refuge in the mountains and of the likelihood that the city was to be betrayed, it would be very strange if many at least of the non-combatants had not taken refuge individually according to the suggestion.

The great question in regard to the topography of Eretria is whether or not the present acropolis walls are those of the pre-Persian city. I believe that they are pre-Persian, and the very walls to which the scattered Eretrians who were not carried off to Asia returned. But for a single passage in Strabo, no one would ever have supposed that a city like the pre-Persian Eretria could have been established anywhere along this coast except on this very hill. Settlers who left this out, and chose another spot near by, would have become more proverbial in Greece than the "blind men" who chose Chalkedon and left Byzantion to later arrivals. But Strabo (p. 403), in reckoning distances from the Bœotian side to the Eubœan side of the gulf, makes a distinction between Old Eretria and New Eretria, which would seem to locate the pre-Persian city a little over a mile to the east of the later one. In spite of the doubt whether Strabo ever visited this region, and in spite of his colossal errors in regard to places which he has not visited,²⁰ geographers have generally sought to identify some of the foundations of walls to the east of the acropolis with old Eretria. It is refreshing to find recently a spirit of revolt against this slavery to a passage of Strabo. Lolling, in Iwan Müller's *Handbuch der klassischen Altertumswissenschaft* (III, p. 192), says simply: *Eine Stelle weiter östlich wurde als Alt-Eretria bezeichnet.* The same author in the *Mittheilungen d. deutschen archäolog. Institutes in Athen*, vol. x, p. 353, says: *Das Schweigen der Historiker und aller anderen Schriftsteller berechtigt uns zu der Annahme, dass die Bezeichnung der Fundamente unweit der Stadt als Alt-Eretria auf eine Linie zu stellen ist mit der jetzigen Bezeichnung Paläochora, für eine Ortschaft deren Name verschollen ist.*²¹ Strabo being treated as a reporter of traditions, we may make Lolling's words (*l. c.*) our own: *An eine wirkliche Verlegung der Stadt, und noch dazu an eine so nahe liegende andere Stelle, wird Niemand glauben, denn so gewiss die Stadtgründung Athens sich an die Akropolis anschloss, so deutlich ist auch die vortretende Höhe des eretrischen Olympos von Natur zur Akropolis einer grösseren Stadtgründung des Nord-Attika gegenüber liegenden Küstenstrichs prädestinirt.*

But, besides the impression which one gets from sojourning in Eretria that here and here only must the city have found its acropolis,

²⁰ For the confusion between Kirrha and Krissa cf. STRABO, p. 416.

²¹ In addition to the several cases of "Alt-Theben," which Lolling adduces, the striking case of Palaia Larissa might be adduced, the name under which Krannon was hidden until it was brought forth by Leake.

the remaining walls make upon any one first and last an impression of great antiquity. If it is not absolutely certain that they are pre-Persian, it is certain that they cannot be much *later* than the Persian War.²² But for a mere remnant of returning fugitives, who would lay out a new acropolis of such large proportions? It is clear that the existing acropolis belonged originally to a large and prosperous city. Here is a homogeneous system of polygonal wall more than a mile in extent, with towers of polygonal masonry at irregular intervals, enclosing the whole area of the acropolis hill, which slopes to the south and the harbor, but falls off abruptly on its other sides. One may suppose New Eretria in these old walls to have regained gradually new life and strength, leaning perhaps on the arm of Athens.²³ In the time of Perikles, 446 B. C., it seems to have been recalcitrant with the rest of Euboea, and to have required the controlling influence of some Athenian kleruchs.²⁴ At last, in 411 B. C., it threw off the Athenian yoke in a rather treasonable manner. The Athenian fleet being beaten by the Spartans in a naval engagement off the harbor, a disaster brought about largely by the Eretrians having refused to furnish supplies, many Athenians escaped to Eretria as to a friendly city, and were immediately put to death by the Eretrians.²⁵

Something of the history of the period subsequent to the Persian War we may trace in the walls. The first use of returning prosperity would naturally be the repair and strengthening of these walls. At the northeast angle was always one principal entrance, the approach to which was flanked by a wall over 100 feet long, departing from the main wall at a very acute angle, and so forcing an enemy to approach the entrance between two nearly parallel walls. The entrance, at the junction of the two walls, was protected by one of the polygonal towers mentioned above.²⁶ This may have been the very entrance through

²² These walls are not unlike the earlier walls of the acropolis of the Boeotian Orchomenos, or those of Kastriza, near Joannina, which was supposed by Leake to be ancient Dodona.

²³ It is a question what Xerxes' fleet would have done to a restored Eretria as it passed along down the Euripos in plain sight of it.

²⁴ Cf. *CLA*, I, 339; THOUK., I. 114.

²⁵ THOUK., VIII. 95.

²⁶ See the plan accompanying Mr. PICKARD's article on the Topography of Eretria. There is a similar arrangement on the west side, where remains of two outlying towers are found, and a line of wall from one of these to a gate in the main enclosing-wall. From the other tower to the main wall we must assume also a line of wall, though it is now impossible to trace it.

which the Persians passed. Whether they broke it down or not, it has evidently been remodelled on a large scale, and made the one principal entrance. Two large towers, one at the corner of the main wall, and another at a lower level at the end of the projecting wall, make a strong defense of the approach to the long lane through which the enemy must still pass after having forced this approach. These towers are built much more in regular courses than the older towers, but even they could hardly be later than the Peloponnesian War. On the east side and also on the north side, a massive tower has been added at places where the wall seemed to need strengthening. Though all these added towers display the same general plan, the north tower is the most regular in construction, and so probably the last one built. It has no organic connection with the old wall, but is built up against it, while the east tower is built right across the wall. All this work seems to have been completed before the Macedonian period.

At the time of the formation of the Second Athenian Confederacy, 378 B. C., Eretria cheerfully joined it.²⁷ At this time Eretria had probably become, if not relatively as large as before its destruction, because the other cities of Greece had grown rapidly since the Persian Wars, yet absolutely as large. This may be inferred from the extent of the walls of the lower town. Along the bay, on which the modern village stands, and at some distance to the east of it, run these walls, with finely laid foundations, joining the acropolis to the harbor and enclosing a space large enough for a city of 40,000 inhabitants, as the old Greeks used to quarter themselves. We cannot suppose these walls to be a huge shell created for a population about to come, by a visionary like Otho, who laid out the modern village. Their structure would admit of referring them to the third century, but it is more likely that they belong to the fourth. To this same period we may assign the theatre, which was remodelled from time to time. After Leuktra and the breaking up of the Athenian Confederacy, the period of prosperity for Eretria was doubtless seriously impeded by the rapid changes in its foreign relations, which were always accompanied by factions at home.²⁸ In 366, a certain Themison, who was in control of Eretria, wrested Oropos from the

²⁷ DIODOR., xv. 30; CIA, II, 1, 17.

²⁸ For a vivid picture of the unhappy condition of Eubœa at this time, see CURTIUS, *Gesch. Griech.*, III, p. 589.

Athenians and turned it over to the Thebans.²⁹ When Philip began to play a controlling part in Greek affairs, it is certain that the Eubœans did not view his encroachments with that deathly anxiety with which Demosthenes watched them. They had already become somewhat accustomed to being a football between larger powers. There was always a large party in the different cities inclined to seek salvation through Philip. Perhaps it required as much fomenting on the part of Athens to keep the anti-Macedonian spirit alive as it cost Philip to lay it. From Philip's occupation of Amphipolis and his first serious break with the Athenians to his victory at Chaironeia, a period of nearly twenty years, Eretria can have had little settled quiet. It emerges into the light, but into the distorted light of the orations of Demosthenes and Aischines. Men, called by Demosthenes tyrants, followed one another in quick succession. These were, doubtless, men who obtained influence with their fellow citizens much in the same way that Perikles and Demosthenes obtained it at Athens. Sometimes, however, they may have owed their elevation to their influence with the foreign power. Of these so called tyrants, Themison and Kleitarchos³⁰ were Philip's men; Menestratos³¹ guided affairs for a while in the interest of Athens. Ploutarchos, on whom the Athenians counted, proved to be their worst enemy, abandoning them almost to their ruin in the battle of Tamynai, 350 B. C., to which he had invited them as allies to dispossess his rival Kleitarchos and win the city for themselves.³² This second treachery of Eretria, from which the Athenians escaped only by the presence of mind and the masterly generalship of Phokion, must have given the Eretrians a bad name at Athens. Yet in 340 B. C. we find Athens, in a magnificent burst of enthusiasm evoked by Demosthenes, driving out the last and worst of the tyrants, Kleitarchos, and freeing Eretria for the last time.³³

In Demosthenes' reference to Eretrian affairs, frequent mention is made of Porthmos.³⁴ This seems to have been some harbor of Eretrian territory, perhaps identical with the present port of Aliveri, the

²⁹ Cf. DEM., XVIII. 99, AISCHIN., III. 85. In 357 B. C. the Athenians "freed" Euboia, as they called it; *i. e.*, they once more obtained a controlling influence, by breaking down the power of Thebes in the island by an expedition suggested by Timotheos and participated in by Demosthenes: DEM., XVIII. 99. Probably Eretria shared in the benefits of this deliverance, whatever they were.

³⁰ DEM., IX. 57 f.

³¹ DEM., XXIII. 124.

³² AISCHIN., III. 86 ff; PLUTARCH, *Phok.*, 12 f.

³³ DEM., XVIII. 87; DIODOR., XVI. 74.

³⁴ DEM., IX. 33, 58; XVIII. 71; XIX. 87.

town of Aliveri corresponding to Tamynai.³⁵ But what we read in some commentaries: "Porthmos was *the* harbor of Eretria," is certainly nonsense. Eretria had a good harbor of its own immediately under its own walls. So complete was its identity with the city that it could hardly be possible that it should bear a separate name.

It must have been almost a comfort to Eretria and the rest of Euboia when they were at last landed in the Macedonian camp, and knew where they were. So well content were the Eretrians, that when the Macedonians showed signs of falling before the Romans, they were in no haste to change masters. The report which Livy (XXII. 16) gives of the stubborn resistance here offered to the combined fleets of Attalos, the Romans, and the Rhodians, indicates no falling off in valor since the days when the Persians were before the gates; while the great number of statues and paintings (*plura quam pro urbis magnitudine*), taken by the conquerors, speaks well for the refinement of the city under Macedonian rule. It had not, even in former days, been wholly neglected by the Muses and Graces. The poet Achaïos was a native of Eretria,³⁶ even if greater Athens claimed him as hers in his later years. Here also was a school of philosophy, founded by Menedemos, a disciple of Plato.³⁷ The Macedonian period was a good time for the philosophers to sit and think.

At about the beginning of the Macedonian period we find Eretria beginning to wrestle with its hydra, the great swamp on the east side of the town. In an inscription discovered at Chalkis and published in the *Ἐφημερίς Ἀρχαιολογική*, 1869, p. 1 ff., it is recorded that a certain Chairephanes agrees to drain the marsh (*λίμνη*) in at most four years. For this he was to have the use of the recovered land for ten years at an annual rent of thirty talents. The editor of the inscription, Eustratiades, puts its date at 340–278 B. C. At any rate, it was of a time when the city was still independent. The *βουλή* and the *δῆμος* appear as in possession of authority.

Under Roman dominion Eretria continued to flourish. At the time of Augustus it was still the second city of Euboia.³⁸ It was nominally free, too, after the battle of Kynoskephalai.³⁹ If actually under the Roman rule, it at least enjoyed the privilege of being freed from that of Athens. There is one wall on the acropolis which, by the presence of mortar, is distinctly marked as Roman. This is the cross-wall high

³⁵ STRABO, p. 448.

³⁶ ATHENAIOS, x, p. 251, c.

³⁷ ATHENAIOS, II, p. 55, d.

³⁸ STRABO, p. 446.

³⁹ POLYB., XVIII. 30.

up on the hill.⁴⁰ There are also several repaired places of uncertain date in the main wall, some of them most likely of the Byzantine time.

In the Byzantine period Eretria may be said to have no history. It is with a real sense of loss that we find the half dozen lines devoted to Eretria in Stephanos of Byzantion largely taken up in telling how to form and decline the gentile nouns. It may have been prosperous for a long time after its records cease for us. Indeed, the numerous Byzantine graves, found often in layers above earlier ones, would seem to indicate that a great many people died in Eretria during that time. Whether at last the city perished by the breath of its own pestilential bogs or by some unnamed incursion of barbarians, we cannot tell. At any rate, it seems not to have played any rôle beside Chalkis in the wars of the Turks and Venetians.

The attempt of King Otho to revive an ancient city on the site of the lower town was a fight against nature. The brave Psariots could fight the Turks, but fever-bogs conquered them; and now the wide streets are given up to grass, and the empty houses stand deep in water in winter and spring. The Naval School, looming up above the other houses, looks mournful with its windowless and roofless walls. In spite of the visionary scheme of the king, in another century the site will probably be again as desolate as that of Eretria's ancient ally, Miletos.

RUFUS B. RICHARDSON.

II. INSCRIPTIONS DISCOVERED AT ERETRIA, 1891.

1.  I O T H [B]ιότη
  ΠΙΣΤΟΤΕΛΟΥ [Α]ριστοτέλου

On a fragment of a marble stele 55 × 42 centimetres, broken at the bottom. The letters, 2 centimetres high, are neatly cut with almost imperceptible apices. The distinctive letters for forming an accurate judgment as to the date of the inscription are wanting, but neither the form of the genitive in *ου* nor the slight curve in the horizontal lines of the letters necessitates putting it later than the third century B. C. This inscription gains an importance hardly to be ascribed to any of the other thirty epitaphs discovered, owing to the possibility (one can hardly claim more than that) of some connection with the great Aristotle, who died at Chalkis. The elegance of the marble tomb in which it was found, apparently the finest in

⁴⁰ See plan with Mr. Pickard's article.

Eretria, the city of tombs, indicates a person of distinction. Some signs in the objects found in one of the graves might even be thought to point to the philosopher. The inscription falls in well enough with this hypothesis, which does not imply that the Aristotle of this inscription was the philosopher himself. No tradition brings Aristotle nearer to Eretria than that which puts his death at Chalkis; but the miles and miles of graves, in many places arranged in strata three deep, suggest, even if they do not prove, that Eretria was a favorite burial-place for non-residents. Four of the inscriptions discovered by the American School are for natives of other towns: cf. Nos. 11, 13, 18, 31.

The name Βιότῆ occurs in *CIG*, II, 3143 and 3227.

The following four inscriptions were also found at the same place, within and without the marble mausoleum. The slabs on which they are cut are plain gravestones requiring no minute description.

- | | | |
|----|----------|------------|
| 2. | ΚΛΕΑΓΟΡΗ | Κλεαγόρη |
| | ΛΕΓΤΙΝΥ | Λεπτίν[ο]υ |

The ends of the letters are generally crossed. The Ionic *η* appears also in No. 20.

- | | | |
|----|-------------|-------------|
| 3. | ΑΠΟΛΛΩΝΙΟΣ | Ἀπολλώνιος |
| | ΑΠΟΛΛΟΔΩΡΟΥ | Ἀπολλοδώρου |

4. A fragment found near the east wall of the mausoleum.

ΑΡΧΙΜ	Ἀρχιμ[ήδης]
ΑΝΤΙΔΩ	Ἀντιδώ[ρου]

- | | | |
|----|----------|----------|
| 5. | ΕΡΓΑΣΙΩΝ | Ἐργασίων |
| | ΒΙΟΤΤΟΥ | Βιόττου |

This is perhaps the latest of all the inscriptions discovered. Cf. No. 31. The letters have apices, and the *ω* is much smaller than the adjacent letters. The name Βιόττου recalls Βιότῆ of No. 1. The double *τ* can hardly be distinctively Bœotian, as the name has the same form in *CIG*, I, 223 and 621, and the former of these at least is Athenian. Βιόττος occurs several times in the Eretrian inscriptions of Ἐφημ. Ἀρχ., 1869 and 1887.

- | | | |
|----|------------|-----------|
| 6. | ΚΛΕΟΦΟΙΝΙΞ | Κλεοφῶνιξ |
|----|------------|-----------|

This and the following numbers were found about one-third of a mile east of the city-wall in a nest of graves on the property of Belisarios.

This inscription is on a fine stele terminating in a beautifully carved anthemion, and bearing a large rosette under the inscription and on each of the sides of the stele, which is about 6 inches thick and of pure white marble. The part remaining of the stele, the lower part being now broken away, is about five feet long. Its width is about 0.76 m. The letters, apart from O, which is smaller, are 4 centimetres high, and are free from apices. This is probably the oldest of all the sepulchral inscriptions discovered, and is at least as early as the fourth century B. C. The stone when found formed the side of a grave of a somewhat late period. It may have belonged originally to a grave near by, in which were found several white lekythoi. The Ξ is the letter which most distinctly bears witness to an early date. The same form is found on a stone now lying in the museum at Eretria inscribed ΞENAPET . The name Κλεοφοῖνιξ appears to be new.

The other stones discovered at the same place are plain, most of them of marble, some more or less broken, and none deserving a minute description as to form.

- | | | |
|----|--|------------------------|
| 7. | Κ Τ Η Ρ Ι Α Λ Α
Δ Ε Ρ Κ Υ Λ Ι Δ Ο Υ | Κτήριλλα
Δερκυλίδου |
|----|--|------------------------|

This is mainly interesting as showing perhaps in Κτήριλλα for Κτήσιλλα an example of the rhotacism for which Strabo (p. 448) says the Eretrians were noted, and which betrayed their connection with Elis. This rhotacism at Eretria is now fully assured by the inscriptions in *Ἐφημ. Ἀρχ.*, 1890, pp. 200 *seq.*

- | | | |
|----|------------------------------------|--------------------------|
| 8. | . Ε Λ Ι Τ Η
. Ε Ρ Κ Υ Λ Ι Δ Ο Υ | [Μ]ελίτη
[Δ]ερκυλίδου |
|----|------------------------------------|--------------------------|

The father's name is of course the same as in the preceding number.

- | | | |
|-----|---|--|
| 9. | Ο Ν Η Σ Ω | Ὀνησώ |
| 10. | ΡΙ Σ Τ Η | Πίστη |
| 11. | . . . Ι Μ Ο Ν Η
Τ Α Ρ Α Μ Ο Ν Ο .
Η Ρ Α Κ Λ Ε Ω Τ Η Σ | [Περ]ιμόνη
Παράμονο[ς]
Ἡρακλεώτης. |

For *Παράμονος* cf. No. 29. *Παραμόνη* occurs on a stone in the museum at Eretria. The name was a favorite in Boiotia, and occurs on the dedication-stele found by the American School in 1890 at Plataia.

- | | | |
|-----|-----------------------|-----------------------|
| 12. | ΚΛΕΙΤΟΜΑΧΗ
ΣΙΜΥΛΟΥ | Κλειτομάχη
Σιμύλου |
|-----|-----------------------|-----------------------|

Letters with apices, Σ somewhat divergent and curved. The second M is nearly upright. These names occur in the same order on a stele in the museum, with an anthemion above and two rosettes below the inscription, which stele has a form very similar to that containing No. 6, by which, however, it is surpassed somewhat in elegance.

- | | | |
|-----|---|--|
| 13. | . . ΛΕΜΩΝ
. . . ΡΤΑΤΟΥ
. ΑΣΣΑΝΔΡΕΥΣ | [Πο]λέμων
[Ῥτε]ρτάτου
[Κ]ασσανδρεύς. |
|-----|---|--|

Κασσάνδρεια was the city founded on the site of old Poteidaia.

- | | | |
|-----|-------|-------|
| 14. | ΣΥΡΟΣ | Σύρος |
|-----|-------|-------|

Cf. ΣΥΡΑ on the Plataian stele alluded to above (under No. 11).

- | | | |
|-----|--------------------|---------------------------|
| 15. | ΜΕΛΗΤ.Σ
ΙΙΑΙΝ.Υ | Μέλητ[ο]ς
[Φ]ιλίν[ο]υ. |
|-----|--------------------|---------------------------|

The O as well as the round part of the Φ were never cut. The stone is perfectly smooth where the incisions would come. Perhaps the workman deferred his round work on account of its greater difficulty, and then forgot it, or possibly used paint.

- | | | |
|-----|------------|--|
| 16. | ΑΛΛ
ΓΑΤ | |
|-----|------------|--|

On a small fragment broken at both sides.

- | | | |
|-----|---|--|
| 17. | ΔΙΩΝ | Δίων |
| 18. | ΔΙΟΤΕΙΜΑ
ΜΗΝΟΓΕΝΟΥ
ΘΗΒΑΙΑ
ΧΡΗ . . .
ΧΑΙΡΕ | Διοτείμα
Μηνογένου
Θηβαία
χρη[στή]
χαίρε |
| 19. | ΣΩΣΙΒΙΟΣ
ΣΩΣΙΚΛΕΟΥΣ | Σωσίβιος
Σωσικλέους |
| 20. | ΙΩΒΙΗ | Ζωβίη |

Note the form Ι (ξ) and the Ionism in the termination, for which cf. No. 2.

21. ΑΡΙΣΤΟΜΗΔΗΣ Ἀριστομήδης
 ΑΡΙΣΤΟΜΑΧΟΥ Ἀριστομάχου

22. ΝΙΚ
 ΜΟΚΡΑΤΟ

The stone is an irregular piece, and the restoration uncertain. The same may be said of (No. 23):

23. ΛΑ
 ΖΝΟΣ

24. ΑΠΟΛΛΩΝΙΟΣ Ἀπολλώνιος

25. ΔΩΡΙΕΥ. Δωριεύ[ς]
 ΔΙΟΓΕΝΟ. Διογένο[υς]

26. ΑΓΧΙΑΡΟΣ Ἀγχίαρως

27. ΠΡΩΤΥΛΛΑ Πρωτύλλα

28. ΔΗΜΑΡΕΤΗ Δημαρέτη

This is on a marble larger and finer than most of the others, with elaborate mouldings at the top. The letters are large, 4 centimetres high.

29. ΠΑΡΑΜΟΝΟΣ Παράμονος
 ΚΕΡΔΩΝΟΣ Κέρδωνος

Cf. No. 11.

30. ΥΡΡΙΑΞ [Π]υρρίας
 ΧΡΗΣΤΟΣ χρηστός

Note O smaller than the other letters; Ξ divergent. Letters handsome and somewhat enlarged at ends of lines.

31. ΚΑΡΠΟΣ Κάρπος
 ΒΑΡΝΑΝΑΙΟΥ Βαρναναίου
 ΑΝΤΙΟΧΕΥΣ Ἀντιοχεύς

This inscription, though more rudely cut, shares with No. 5 the broken-barred A and the extravagant apices, and apparently belongs to the Roman period. The greater part of the other inscriptions probably fall in the second century, B. C.

The name *Βαρναναῖος* occurs in a Delian (Rheneian) inscription, *CIG*, II, Add. 2322, b. 58., and is explained by Boeckh as Semitic "Bar," compounded with some other word. He compares *Βαρναῖος*,

CIG, II, 2319, who is there called Τύριος. For Tyrians at Delos, cf. *CIG*, II, 2271 and 2290.

Besides these inscriptions there is one, probably to be included in a collection about to be published by a member of the German Archæological Institute, to which a passing word may be given. This is on a piece of marble walled into a church just built, still lacking the roof, on the site of an older one at the south foot of the hill Kotroni, about a mile east of the acropolis of Eretria. Just about on this spot probably stood the most sacred temple of the Eretrian territory—that of Artemis Amarysia.

The inscription reads :

.. ΟΥ . . . Χ Ο Ξ	[Πλ]ού[ταρ]χος
.. ΟΥ . ΑΡ Χ Ο Υ	[Πλ]ού[τ]άρχου

It will be remembered that there is a Ploutarchos of Eretria who plays in Demosthenes an unenviable rôle in betraying his city into the hands of Philip. Cf. *Dem.*, IX. 57. In *Aischines* III. 86, the same personage appears as a traitor to the Athenians in the battle of Tamynai. He was probably the most prominent citizen of Eretria at this time, in point of wealth and influence. His espousal of the cause of Macedonia gave him a bad name with the Athenians.

The unlikelihood that there should be in a small city like Eretria more than one family in which Ploutarchos would be used as a name, encourages the supposition that this tombstone belonged to this Ploutarchos or to some member of his family.

Another grave-inscription, found about 7 kilometres east of the city, and about 1½ kilometre back from the shore, has an interest beyond any other of its kind discovered in Eretria. It is on a slab of bluish marble 0.75 × 0.35, and 0.17 thick, with a slightly raised border at the top. A peasant, who showed it to me with an air of great mystery, after leading me through the bushes for more than an hour, allowed me to copy it, as it lay on edge up against a hovel occupied by another peasant. At the time (February 27, 1891) I was told that it had been taken one month before from a tomb which bore marks of having recently been opened, about 300 feet from the house. I could, however, ascertain nothing as to the contents of the tomb, which was a large one, 8 feet square, nor as to the excavators of it. Subsequently I visited the place again, finding it with great difficulty, and took three squeezes ;

but, as the occupant of the house was absent, I could elicit no further information.

The inscription reads as follows :

32. ΕΔΙΟΔΩΡΟΥΔΙ... ΝΕΞΦΥΞΔΙΚΑΙΟΞΚΑΙΕΥΞΕΒΗΞ
 .ΙΘΕΟΞΕΞΘΗΓΗΚΑΓΩΘΕΟΞΕΙΜΙΔΙΚΑΙΩΞ
 ΕΚΓΗΞΓΑΡΒΛΑΞΤΩΝΓΕΝΟΜΗΝΝΕΚΡΟΞΕΓΔΕΝΕΚΡΟΥΓΗ
ΔΙΟΓΕΝΗΣ.....

[Χαῖρ]ε, Διοδώρου Δι[όγε]νες, φῶς δίκαιος καὶ εὖσεβής.

[εἰ] θεός ἐσθ' ἢ γῆ καὶ γὰρ θεός εἰμι δικάϊως.

ἐκ γῆς γὰρ βλαστὼν γενόμεν νεκρὸς ἐγ δὲ νεκροῦ γῆ.

Διογένους

In the first line the dead is addressed with the usual fond farewell. In the last two lines he is made to give his reply, which is a curious argument. "If earth is a goddess, I surely am a god, for I sprung from earth, and became a corpse, and from a corpse earth again." This is cold comfort. Bryant's

"Earth, that nourished thee, shall claim

Thy growth to be resolved to earth again,"⁴¹

is serious and plain, but the sentiment of our inscription seems much like a jest on a serious subject. Inscriptions could hardly have taken this tone before the Hellenistic period. The play is an approach to the Anacreontic drinking song, beginning, Ἡ γῆ μέλαινα πίνει. Though Ge was a rather transparent personification among the gods, and liberties might be taken with her which one did not feel authorized to take with other divinities, this trivial vein is rather characteristic of an age that had lost its faith. Of course, apart from the epigraphic evidence, the lack of any expression of hope would forbid making it a Christian epitaph.

Since the last two lines are hexameters, it would seem likely that the first was also intended to be such. The first foot, Χαῖρε Δι, might pass, but in that case the next foot would be impossible. If we take the well-nigh impossible foot, Χαῖρε Διό, to start with, we can then run through four good feet, but we come next to δίκαιος, which refuses to conform to the exigencies of the verse, and besides we have more than six feet. The last three syllables refuse to make a hexameter ending. In spite of all the liberties taken with hexameters in epitaphs (see Al-

⁴¹ Cf. KAIBEL, *Epigrammata Græca*, No. 606.

len in *Papers of the American School of Classical Studies at Athens*, vol. IV, p. 45 *seq.*), it is venturesome to try to make anything more than plain prose out of this first line.

There was once a fourth line of the inscription, but it was subsequently entirely erased, except the name, *Διογένης*. The cutting may have been done by more unskilful hands than some others of the same age; but even with this allowance the stone seemed to bear upon its face marks of antiquity. Σ and \mathcal{M} are very much spread out; Θ and \mathcal{O} are smaller than the other letters.

Besides the grave-inscriptions, three small fragments apparently of a *psephisma* were found in the excavations about the stage in the theatre. The forms of the letters seem to make the inscription as early as the fourth century. The following is a copy:

33.

Θ
 Α Ν Δ Ε . . . Ν
 Τ Ω Ν Δ . . Δ Ι
 Γ Ο Λ Ε Μ Α Ρ Χ
 5. Ψ Μ Η Ν Ι Α Ι Τ
 Τ Ο Θ Ε Α Τ Ρ Ο Ν
 Ω Λ Ε Ι Ν Ω Σ Τ
 - Ι Ν Ε . Τ Ο Ο

 Ο Λ Ε Μ
 10. Ο Υ Ν Τ
 Ο Ι Ε

Between N and A, line 5, if the first letter is *iota*, there is room for one more letter in the break.

Very little can be made out of this inscription, except *πολέμαρχ[ος]* line 4, *τὸ θέατρον* line 6, perhaps *[π]ωλείν ὥστ[ε]* line 7, *[πωλε]ῖν εἰς* *τὸ θέατρον* line 8, *[π]ολέμ[αρχος]* line 9.

Possibly the inscription has reference to the sale of some property by an officer called polemarch in the theatre, or for some use connected with the theatre.

RUFUS B. RICHARDSON.

III. EXCAVATIONS IN THE THEATRE OF ERETRIA.

At the end of January, 1891, Dr. Waldstein and I went to Eretria, and, as soon as the weather permitted, the excavation of the theatre there being placed in my charge by Dr. Waldstein, work was begun.

The foundations of the stage-building that Ludwig Ross had traced in 1833 disappeared after the settlement of the Psariani in 1836. Here and there single stones appeared above the ground, but the position of no walls could be located with certainty. The fact, however, that the ground level on the site of the stage-building was between three and four metres above that of the orchestra, supplied a hopeful sign that, at least in some parts, walls of importance would be found.

When the campaign closed on March 18, we had worked $27\frac{3}{4}$ days, with an average of 19 men, including two cart-drivers. For removing the earth we relied especially on carts and wheel-barrows, as baskets proved less suitable for our purpose.

The eastern wall was cleared first, and it was a great disappointment to find that the foundation was the only course remaining; but it was reassuring soon to discover that at least the front wall went deep. When the work had reached this point it was found practicable to divide the men into two bodies. One party removed the earth from the front of the orchestra, and as far back as the middle of the stage-building. The other set cleared the southern half of the stage-building. In this way, the two parties keeping nearly the same pace, the entire structure was laid bare, proceeding from east to west. The exact correspondence between the two sides was striking, when, after weeks of labor and study, the second half was found minutely to reproduce the first, and we could hence estimate with certainty the location of the different walls (see PLAN of theatre, PLATE XI).

On February 14, while cutting a broad trench along the double front wall (ΘΘ and HH), which we shall call the *scenæ frons*, the workmen came upon an opening (Ω) in the wall about two metres wide. On following this up, it proved to have a vaulted roof in good preservation. Soon the workmen on the other side, more than fourteen metres away, struck an opening into the ground. Here the keystone and a few of the upper voussoirs were gone. Grave-searchers, with whom this region abounds, imagining that there was a grave below, had broken through the vault. The clearing of this large passage, which was entirely filled with earth and 2.95 m. deep, occupied a great deal of time. Owing to the limited space, only two men could be employed, and, from the construction, it had to be cleared almost entirely from the north end. At length, on the afternoon of March 12, the way was open from one end to the other. The earth, from the position of the strata, had evidently sifted in from the two ends. Heaps of

marble chippings lay at the northern end of the vault. But these were only the refuse of the great mass of marble that had found its way to the lime-kilns, of which there are two in the immediate neighborhood. Among these chippings were several fragments of statues and countless pieces from the marble proscenium. Immediately in front of the opening to this vaulted passage were found fragments of a balustrade in poros.

On March 5 and 6, when it became evident that no stoa was immediately connected with the theatre, on the suggestion of Dr. Waldstein I sank a trench from chamber IV in the direction of some ruins toward the southwest. Nothing was found in the trench, but upon clearing the ruins they were seen to be singularly solid foundations, 7.50 m. \times 5.40 m., possibly having connection with other foundations. In the first place the ground had been prepared, then large blocks, carefully fitted, had been laid to form a double floor. No indication was found of the purpose of these foundations, but the solidity of the work suggests that a temple stood here—perhaps that of Dionysos. Along the walls were found fragments of marble including a lion's paw.

To examine the character of the retaining-wall HH on the inside, a big hole was cut along the wall down to the foundation. Along the upper part of the wall lay miscellaneous rubbish and architectural members in poros. Below, the foundation broadened to a width of 1.62 m. The retaining-wall exhibits the same roughness and irregularity on both sides, from which the conclusion is drawn that neither side was ever visible.

On March 13, while clearing between the proscenium stylobate and the *scenae frons*, I came upon the opening to the underground passage of the orchestra. The descent into this lies a little to the east of the mouth of the vaulted passage. Over the opening were found two fragments of a marble Ionic architrave.

On March 14, two interesting discoveries were made. Resting on the *scenae frons*, but not *in situ*, I found a poros block with a metope in the middle and a triglyph on either side. It appears to belong to a double-triglyph system, and is important for determining the intercolumniation of a row of columns that may have surmounted the *scenae frons*. Whether this wall bore a range of columns or was continued up as a plain wall, the frieze block, both from its material and from the position in which it was found must have belonged to it. The width of the metope is 0.48 m. and that of the triglyphs 0.33 m.,

while the height is 0.44 m. The second discovery was a drain found between the oblique walls on the east side.

The digging on the *skene* varied in depth from 0.80 m. to 1.10 m., while immediately in front of the *scenæ frons* it reached the depth of 2.50 m., and even more at the east and west ends, the depth gradually diminishing toward the orchestra. The mass of accumulated earth in front of the *scenæ frons* was no doubt due to the fact that when the facing-wall had been taken away in a large measure, the weight of the

earth behind precipitated the upper part of the retaining-wall and lodged in front. There is reason to believe that the ground on the site of the present orchestra as well as behind the retaining-wall had originally the level of the five chambers, that of the surrounding ground. On the surface we found the usual black earth, under it a soft clay, and lastly we came upon the hard virgin soil. About the older foundations the soft clay reached deeper, showing that trenches had been cut before the foundation was laid.

We found architectural fragments both of poros and of marble. Of poros in the Doric order were found several drums, a capital, triglyphs, and a cornice; also of poros, in the Ionic order, an entire semi-column, and four capi-

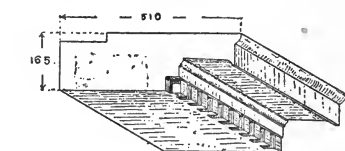


FIG. 2.—Cornice.

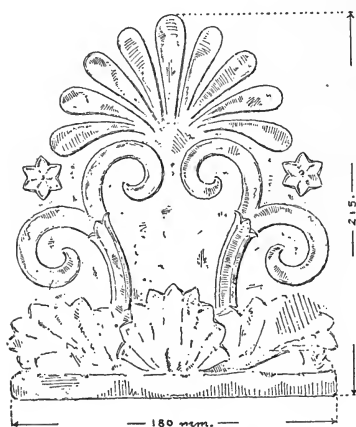


FIG. 3.—Anthemion.

tals almost completely preserved, but of a late style. This semi-column now serves as a sill in the entrance to chamber II; it has eight flutes and is 2.36 m. long, 0.34 m. wide and 0.47 thick. The volutes of the capital belonging to it spring out of an acanthus the sprays of which join in front under an egg-and-dart moulding. The marble fragments were found especially in the neighborhood of the proscenium, and evidently belong to it. Of marble in the Doric order we found a part of a channeled semi-column and corresponding tri-

glyphs and cornice. In the Ionic order we found a part of a fluted semi-column, an architrave and cornices of two types, with dentils (*Fig. 2*), and without them. Two anthemia of marble (*Fig. 3*) and several of terracotta were discovered, besides Roman lamps, weights, a discus, and some corroded coins.

IV. THE STAGE-BUILDING OF THE THEATRE OF ERETRIA.

In dealing with masonry at Eretria there are peculiar difficulties in the way. Little is known about its monuments and style of art, and, being difficult of access it has seldom been visited by archæologists. On account of its out-of-the-way position, rules of construction which have been established as archæological landmarks at Athens and elsewhere, fail utterly when applied here. Certain forms of masonry, for example, seem to have obtained at Eretria long after they had died out in many other places. Not only the same kind of stone, but even blocks cut to the same size, appear in buildings of different epochs. At the same time when clamps and other usual criteria of age are found in those parts only which on their face bear the stamp of a later age, one is entirely thrown back upon the position of the walls to solve their purpose and place in point of date.

The *cavea* of the theatre faces the south, and the stage-buildings stand east and west, deviating only six degrees from that line, the west end being six degrees north of west, and the east end the same number of degrees south of east. The situation of the theatre to the southwest of the acropolis, on a spot where no benefit could be derived from a slope to support the rising tiers of seats, is likely to be connected with the fact that there was a sanctuary of Dionysos in the neighborhood. The solid foundations in the vicinity, mentioned above, may prove to be those of a temple of the wine-god. If in choosing the sites for their theatres the ancients had an eye to the beauty of scenery, it may be noticed that sitting in the theatre you are facing the Euripos, while beyond are the hills of Attika and Boiotia with Parnes and Helikon in the distance. The original surface of the ground appears to have been almost level, rising a little toward the northwest and falling into a slight depression toward the southeast.

From the sectional plan (PL. XI) giving the elevation of the different parts, we see how the two front walls II and ΘΘHH have their foundations a little under the level of the orchestra, while the bases and the two remoter walls BB and AA lie fully three metres higher. In explain-

ing the walls I shall follow the historical development as being at the same time the true order and in this case the simplest.

Turning to the *PLAN*, it appears at a glance that there exists a close resemblance in plan between the two parts of the stage-building divided by the great central passage $\Omega\Omega$. This vaulted passage, the bottom of which is on a level with the orchestra, lies under the floor-surface of the stage-building. Over the vault and within the south wall we have a chamber (III) 6.33 m. by 3.90 m. This is flanked on either side by chambers (II and IV) of the same size, and those again by long and narrow chambers (I and V) extending five metres and a half beyond the others toward the front. The outline ($AA\Gamma\Delta BB\epsilon Z$) is a long and narrow building with wings projecting forward. The foundation of this building consists of coarse poros blocks averaging 1.30 m. in length, 0.68 m. in width and 0.46 m. in height. The blocks are laid lengthwise except in the south wall of chambers I and II. At this point, the ground being lower, the foundation consists of two courses, and, to obtain greater solidity, the blocks in one lie crosswise and are moreover supported by buttresses where the partition-walls meet the south wall. As the ground gradually rises toward the west, the foundations go deeper. The stones are well cut and fitted, though no great pains were taken to form an even surface in foundations intended to be hidden underground. The break in the middle of the walls is of a later date, when the vaulted passage was constructed. There are openings ($\gamma\gamma$) into the flank chambers on each side. Here the foundation is interrupted for a distance of 1.30 m. The ends of the adjoining blocks are cut down as if to receive a sill. At the corner beyond the door, and also between the door and the north wall of the three chambers, are signs of piers and antæ, $\delta\delta\delta\delta$. Where the wall BB ends in the chambers on the flanks, the terminal blocks are placed at right angles. In line with these in the north wall of the same chambers, corresponding blocks $\epsilon\epsilon\epsilon\epsilon$ are similarly placed. These blocks may have been parts of cross-walls in these positions.

On the greater part of these foundations there remains a course of fine polygonal masonry 0.48 m. wide. The jointings are good and the work is done with a great deal of care. Wherever it is still standing it is 0.50 m. high. The material is a white, hard limestone. If there were faults in the stones or pieces roughly broken off, the edges were made regular and other stones fitted in. The polygonal wall indicated in black is still standing on all the partition walls, on

the north wall, at the southwest corner, and there are traces of it on the south and east walls. The restored portions of it are indicated in a lighter shade, with single-hatched lines. No trace appears on the foundations of the projecting chambers. No doubt it stood here also, but was removed during the reconstruction.

I have mentioned the doors into the flank chambers. There are also entrances into the three middle chambers from the front. The entrance to chamber III is in the middle of the wall, while in II and IV it is thrown to one side. The side openings are 3.33 m. and 3.38 m. wide. The middle opening is somewhat less, but here the stones have now fallen forward: we may be justified in assuming the same width for this also. On both sides of the openings lie quadrangular blocks of bluish marble. On the outer side of the side doors these blocks are 0.41 m. long and 0.20 m. high. The adjacent blocks of the wall are cut in such a way as partly to overlap the marble blocks and hold them firm. On these blocks stood the *παραστάδες* or door-jambs. In the west door the lower part of one is still standing. It is an upright poros block broken off at the present height of the wall. The existing sills, which lie at about the height of the six bases in front and are moulded, are later. At the ends of the sills, holes are cut in to receive the wooden doorposts, and a groove runs along the upper side. The inside edge, remaining at the middle for the distance of nearly one metre and a half, is cut away at the ends.

Such are the remains of what I consider the oldest stage-building of which there is any trace in the Eretrian theatre. In its main lines it has the same arrangement as the stage-building of Lykourgos at Athens: two parallel walls behind and towerlike structures on the flanks. The front wall has three doors and the *paraskenia* have one each. The present orchestra lies too far away and too deep to have been that of this stage-building. The orchestra corresponding to this structure must have been on a level with the doors and must have extended close up to the building. The supposed position of this orchestra is indicated on the plan by a dotted circle. As no vestiges remain, both the orchestra and the seats were presumably of primitive construction. Near one of the stage-walls were found a few words of a fourth-century inscription referring to a theatre. This building being the oldest on the site, and answering also in plan to a theatre of the fourth century, we identify it with that of the inscription. There appears to be little doubt that the remains we have just described existed long before the

other parts were added. For, taken separately, the old stage-building has a clear purpose, but considered in connection with the buildings in front, it loses its meaning. The new buildings in part destroyed the old and in part left its foundations undisturbed, as they lay deeper than the later walls.

Whatever the causes or the motives, a new and more elaborate theatre was erected, taking the old building partly into account and retaining its orientation. The new theatre might have been built against the acropolis hill, but the same reasons that placed the old below in the plain, kept the new one there now. When it was once decided that the theatre should remain on the same site, there were evident advantages in sinking the orchestra lower than the stage-building. It would simplify the substructure of the *cavea*, and would give an elevated *scenae frons* with less labor and expense. So the orchestra was lowered about 3.50 m. and the earth removed was used to build up the *cavea*. Against the bank of earth toward the *skene* a strong retaining-wall HH was built. The floor of the new building lies a little higher than that of the old one. The old floor-level of the chambers is given by the sills, the cuts for which still appear in the foundation-walls. The new sills are several centimetres higher, and these indicate the level of the new floor. The six column-bases supply corresponding evidence. The wide intercolumniation, and the fact that they are equally distant from BB and OO, show that they form an inner order and that we can assume the same level on both sides. These bases bore the columns that upheld the roof. That they belong to the second structure is shown by the fact that they in a measure obstruct the passages $\gamma\gamma$, from which it also appears that they were placed in position at a time when those passages were no longer used. It is important to fix the level of the pavement, as this will help us to arrive at the height of the front wall. But having the height of the bases, 3.83 m., we have also that of the front wall, which must necessarily be the same. Whether the front wall was continued as a solid wall or whether it supported a series of columns, we have so far not been able to determine, as the architectural members found could be fitted to either theory.

Communication with the orchestra being difficult over a wall 3.83 m. high, access was afforded by an underground vault ($\Omega\Omega$) passing under the *skene* from behind the building. At the southern or ex-

terior end, steps lead down to the level of the orchestra. Fig. 4 shows a section through the vaulted passage in the line of the column-bases. On the inside the passage is 1.98 m. wide and 2.95 m. high, and its length is the depth of the stage-building, 14.55 m. It is built of large poros blocks which were originally smooth-dressed on the exposed face, but now the surface is broken and has crumbled from dampness and exposure. The blocks have an average length of 1.36 m., and the three lower courses a height of 0.64 m., while the three upper courses average 0.46 m., and the keystone 0.44 m. Though the three lower courses have an inward inclination of 0.08 m. the arch proper begins with the fourth course. Allowing the slight inclination

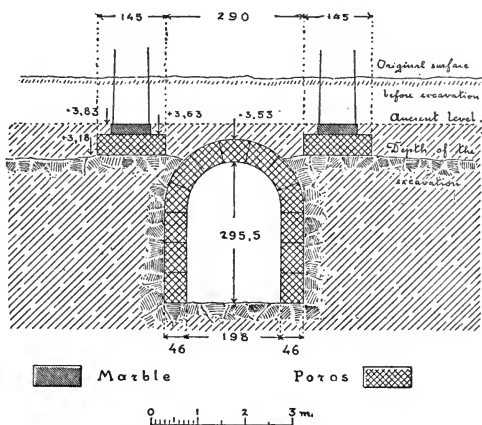


FIG. 4.—Vaulted Passage.

to be due to pressure exerted in the lapse of time, the upper courses and the keystone would form a semi-circle with a radius of about 1.00 m. The joints are exact, though they do not correspond in alternate courses. The vault is entire for a distance of 7.40 m., having fallen in at both ends. That the vault is contemporaneous with the front wall or *scenæ frons*, is shown by the fact that the courses of the two are bonded together.

That this vaulted passage was a public entrance into the theatre is improbable, both because it is too narrow and because no necessity appears for an entrance in such a situation. Though the passage itself is 1.98 m. wide, the door opening into it from the orchestra is only

0.99 m. wide. Moreover the steps are steep and narrow—not such as we should expect where crowds were to ascend and descend. On the east side a *parodos* about 5 m. wide has been partly cleared, and on the other side will no doubt be found its counterpart. With ample *parodoi* on both sides of the *skene*, no reason is obvious for constructing a third access only 0.99 m. wide. In many theatres entrances are found from the level of the orchestra to the stage-building, and here, doubtless we have something of the same kind, only the passage lies under the surface owing to the elevated structure of the stage-building. Two solutions were open to the architect: the one a permanent stairway over the front wall, the other an opening through the wall and an underground passage; the latter solution was chosen perhaps because a stairway from the height of the front wall would necessarily project far into the orchestra.

The front wall consists in fact of two walls, the retaining-wall HH and the facing-wall OO. The retaining-wall, not intended to be seen, is built of rough poros blocks of about the same dimensions as those in the foundations of the *skene*. Its present height is 2.39 m., or 2.335 m. above the level of the circle of the orchestra. That it was originally higher appears from the fact that a great number of similar blocks were found lying in a line along the wall. It may have been as high as the bases, or, being merely a retaining-wall, it could have ended when it reached the surface of the ground. The roughness of the work is sufficient proof that this wall was never visible. There still remain in places as many as three courses of a facing-wall. The lowest course, which juts out 0.19 m. beyond the upper courses, is 0.64 m. high, and where the vaulted passage begins, the blocks are turned in at right angles in such a way that the blocks of the second course of the vault overlap them by one half. This shows that the two were constructed at the same time. The blocks of this course, too, are of the same size as those in the three lower courses of the vaulted passage. At the joints and along the upper edge are bevelled drafts. While the upper courses continue 0.59 m. beyond the retaining-wall and then at OO make a turn to the south at a slight angle, the lower course turns to the north (AI and KI) 8.885 m. from the vault and is then merged in other walls (IM and IN), which, at the same distance, make a similar turn toward the south. The second course of OO is of a finer poros, and is worked with extreme care. The joints are made with such exactness that they are not easily perceived. The course is 0.43 m. high and the blocks are as long as 2.42 m. and 2.62

m. Parts of a third course remain at the ends. The length of the wall $\Theta\Theta$ is 26.20 m. Though the upper part of this wall has perished, it must have reached at least the level of the six bases. It is to be noticed that the second course of the wall $\Theta\Theta$ is continued without foundation between K and Θ . At the other end, between Λ and Θ , the foundation is irregular and does not come out flush with the upper portions of the wall. Before reaching the oblique angles at $\Theta\Theta$, the wall extends for 0.59 m. unsmoothed, and there, probably, were the outer walls, ΘN and ΘM , of the *paraskenia*.

In the old *paraskenia* there remain angles of walls forming right angles, which in one limb, ΓH and ΠH , advance toward the front wall, and in the other, $\tau \Sigma$ and ΠO , extend beyond the stage-building proper. On the west side, the wall $\tau \Sigma$ appears to have extended at least 9.50 m. from the angle in the old *paraskenion*. It is not unlikely that the wall turned toward the north at about this point and joined the oblique wall $P\Theta$, forming thus an irregular chamber similar to one in the same position in the theatre at Epidauros. On the east side only two stones were found of this extension beyond the old wall, but these were enough to show that it had once gone further. These walls are laid on the ground without foundations, and are a patchwork of all kinds of material, especially of stones from the polygonal wall. The inner surface is faced with fragments of marble, and a bit of stucco was found in one place. That this wall is later than the old *skene* appears, apart from its bad construction and lack of foundation, most clearly in that it cuts away a corner of the old flank chamber, too small for a separate room. What remains of the wall between the old *paraskenia* and the front wall is built of the usual poros blocks. On the east side these blocks are laid one upon another endwise, while on the west side the position of the blocks in adjacent courses alternates; but on both east and west sides the walls are built with an irregularity which shows that they were hidden underground. This is important, as it enables us to establish that the surface of the soil was approximately on a level with the bases, and we gain another argument for restoring the front wall $\Theta\Theta$ to the same height. On the elevated part of the *skene* and in line with the cross-walls ΛI and $K I$ stand two bases.

Within the irregular rooms at the sides, and parallel to the oblique walls, are two little structures the significance of which is not yet clear. Their parallel side walls are 0.46 m. apart, and there extended a marble slab from the outside upper edge to the inside bottom level, broad

enough to touch the two walls. The lower end of the slab rested on another marble block. Beneath the structure on the east side we found the drain; if there is a similar drain on the west side it has not yet been recognized. Our excavations closed before these structures could be fully examined. They seem however to be connected with the drainage-system. It may possibly be that the water from the roof of the stage-building was conducted to these points and hence escaped into the drains below. What may have existed between the oblique walls is not yet known, as our work has gone only a little beyond the oblique angles OM and ON. Here may have been ramps ascending to the proscenium, side by side with the *parodoi* into the orchestra, as at Sikyon and Epidauros.

The work of the second period, then, consisted in erecting a new *scenæ frons* with projecting structures or *paraskenia* at the ends. Instead of a series of chambers, we have in this new stage-building a wide hall divided by a longitudinal range of columns. Owing to the height of the front wall and the disposition of the *skene* and orchestra, access to the latter was gained under the floor of the stage-structure.

Finally we come to the last change, a change similar to that found in many other theatres—the erection of a columned front (II) between the two *paraskenia*. At the Amphiareion of Oropos this feature bears inscribed on the architrave the designation *προσκήνιον*. To arrive at the date of this construction at Eretria is not easy. At Athens the corresponding feature is known to have been built between Lykourgos and Nero, as it was torn down to be replaced by another dedicated to Dionysos Eleuthereus and the emperor Claudius Nero (?). Hence there it dates from the first century B. C., and the stage-building of Lykourgos must have stood for a considerable time unchanged. This date suits reasonably well in the other instances also. On a poros foundation lies a marble stylobate 19.77 m. long. At the ends are places for two antæ, and between are dowel-holes for twelve semi-columns. The total number fourteen recurs in several theatres, as at Assos and Delos. Across some of the dowel-holes can still be traced the small line marking the axis of the columns. The intercolumniation varies between 1.50 m. and 1.52 m. The square dowel-holes have the usual channels through which the lead was run in. A fragment of one of the columns, Doric and channeled, was found, but unfortunately very incomplete. The general design, however, can be determined from the examples in other theatres. Deep rebates were

cut behind to receive slabs or *πίνακες*, and the stylobate in some places was cut down so that the *πίνακες* should fit closely. The width of the stylobate is about 0.45 m., the inner side being rough. In the middle are traces of a double folding-door with oblong holes for the door-posts and circular ones for the pivots. Two smaller pivot-holes further back point to a wider door of some other period. Now in estimating the height of this proscenium we must remember that there was a door in the wall, which indicates sufficiently that the columns were at least upward of two metres high. Calculating the height of the columns and entablature from the few fragments found, it appears that the proscenium without the stylobate would reach a height of about 3.40 m., or the level of the bases on the *skene*. This height coincides with the rule of Vitruvius that the proscenium should not be less than ten and not more than twelve feet high. Vitruvius is evidently speaking of such proscenia as ours, and it is interesting to find this agreement. Among various pieces of an Ionic cornice, we found one with an angle corresponding to the angles M and N beyond the proscenium. So we have, apparently, a Doric proscenium continued on the sides in the Ionic order.

The fact that the stylobate was left rough on the inside shows that the ground or floor between it and the *scenæ frons* was of the same height. But the opening into the underground passage here lies much lower, and it appears to have been made with a lower level in view. The basement-course of the *scenæ frons* consisted, as has been said, of blocks 0.64 m. high, carefully worked and fitted, showing that it was exposed to view. But, if the floor reached the level of the *proscenium* stylobate, it must have covered 0.44 m., or more than two thirds, of this basement-course. In excavating we found near the lower edge of this basement a layer of gravel. This, as it corresponds with the level of the orchestra-circle and with the opening into the underground passage, I take to show the original level of the orchestra. With the building of the proscenium the level of the entire orchestra appears to have been raised. The stylobate is 0.20 m. high, the lower half of which was left rough and unfinished because it lay under the level of the orchestra and was not seen.

Where definite indications were lacking, the upper part of the *skene* is restored, on the plan, according to the proportions of similar structures.

Just beyond the eastern *paraskenion* the drain is found. Starting from the semicircular conduit on the east side and passing under the

parodos, it turns by the corner of the stage-building at an oblique angle to the southeast, in the direction where the ground is lowest. It is formed of rectangular pieces of red tile open above (Fig. 5), not fitted into one another, but set close end to end and bedded in the ground. The tiles are 0.63 m. long, 0.24 m. broad, and 0.265 high. The drain was covered with separate flat pieces a little wider than itself. The tiles are 0.03 m. thick.

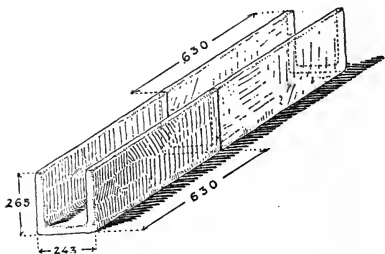


FIG. 5.—*Drain.*

In closing, I would observe that I came independently to the results set forth while directing the excavation of the theatre. It was no small delight to find, on my return to Athens, that Dr. Dörpfeld approved of the plans which I had drawn, and later, when he

visited the theatre, that he corroborated my views, making changes only in minor details. At the same time I must not omit to mention the kindly assistance Dr. Dörpfeld has rendered me in several instances, and the friendly interest he has taken in the work.

ANDREW FOSSUM.

V. THE THEATRE AT ERETRIA. ORCHESTRA AND CAVEA.

In the work of the School at Athens at Eretria, Dr. Waldstein assigned to me the clearing of the *cavea*, orchestra, and *parodoi* of the theatre. This was pursued so far as to determine the level and extent of the orchestra, to follow the lowest row of seats and the bounding-curb of the orchestra from the middle to the eastern *analemma*, and to define, rather imperfectly, the eastern *parodos*. To this must be added the discovery of a most interesting underground passage, extending from about the centre of the orchestra to a point just within the later proscenium-wall. At Dr. Waldstein's suggestion, excavation was carried on also through the *débris* surrounding a lime-kiln near the theatre, but without result.

Work in the orchestra was begun on Feb. 24, with a trench a little more than 1 m. wide, perpendicular to the proscenium at its middle point. Very few fragments were found either in marble or in poros, until, on the second day, at a depth of about 0.70 m., two large poros

blocks came to light lying side by side at a slight angle in the direction of the trench. On digging further toward the stage, it was found that these two blocks made part of an unbroken line of poros, the covering, as it seemed, of a drain or passage of some kind. These stones were carefully laid and the whole structure was very well preserved. Only the corners were sometimes broken away, so that, at one point, the workmen could thrust their pick-handles through and down to the full length. Almost covering the open end of this passage was found a cornice-slab of marble; close by, fragments of marble triglyphs and dentils. When all these were cleared away the existence of a subterranean structure was made certain.

The work at the upper end of this main trench was carried considerably further before anything of importance was discovered. Only one or two blocks of poros and some small pieces of marble came to light. At length the workmen uncovered, at a depth of 1.05 m., what proved to be one of the seats of the lowest tier of the *cavea*. Very soon the line of poros curb bounding the arc of the orchestra was found, 0.20 m. further below the surface. Immediately below the first tier of seats was a broad step serving as a foot-rest for those who sat above, and between this and the curb was a sunken drain paved with poros. Just behind the first seat discovered was a flat, irregular marble slab of considerable size. Toward the west the line of seats was broken, and in digging further up the hill nothing more was found *in situ*. The *cavea*, here at least, was in an altogether ruinous condition, so that the main trench at this end was abandoned. At Dr. Waldstein's suggestion, the digging was now carried along the line of the first row of seats toward the east. A trench was sunk broad enough to include also the curb of the orchestra. All was in a fairly good state of preservation, only a block from the line of seats being missing now and then. A number of marble fragments were found, evidently belonging to thrones. The sunken drain proved to be divided at intervals by very ill-made and irregular cross-walls, resting on the poros bottom, and not quite reaching the level of the curb and the lowest step on either side. The end of the curb was reached some 5 m. before coming to the *analemma* of the *cavea*. At this point the curb was connected with the lowest step by a very good cross-wall of the same pattern and period with itself. Digging was carried for a short distance along the *analemma*; this was very much broken away, and the blocks which made it were heaped together with seats that had fallen from above. The wall of the *pa-rodos*, so far as it was found extant at all, was yet more ruinous. I had

hoped to carry a trench from the orchestra to the uppermost rows of seats, but lack of time prevented this.

Meanwhile, the subterranean passage mentioned had been entirely cleared. The work had been necessarily slow, since in so confined a space only one man could dig at a time, and very awkwardly. Besides, the interior was a closely packed mass of architectural fragments, as drums of columns, with pottery, Roman lamps and other objects. A discovery of importance was made near the north end of this passage. Here the digging was carried more than 1 m. below the ancient level of the orchestra. At this depth part of a marble chair was found, imbedded among loose stones and smaller bits of marble; there was found also a rounded fragment of poros, belonging to the base either of a column or of a statue.

THE CAVEA.

In 1833, according to Ross,¹ some of the stone seats of the *cavea* were still to be seen. He seems to imply that when he visited Eretria eight years later these had disappeared, appropriated by the new settlers as building-material. When our work began, at least two or three seats of the ordinary pattern lay above ground on the upper part of the slope. Nothing whatever was visible besides these, though the general form of the *cavea* was still very clearly marked. The seats were not laid on a natural slope, as is generally the case, but were supported by an artificial mound of earth as noted by Ross (*op. cit.*) This method of construction was rare in Greece proper, but obtained in the theatre at Mantinea, lately excavated by the French School.² Durm³ mentions only the theatres at Alabanda (Asia Minor) and Mantinea as so constructed. More are enumerated by Müller,⁴ but only in Macedonia and Asia Minor. Recently it has been found that the theatre at Megalopolis rested in part upon an artificial embankment.⁵ The embankment at Mantinea was supported by a polygonal wall, and the theatre was made accessible from the rear by a system of external flights of steps; but no attempt could be made to ascertain whether this was also true at Eretria. The *cavea* opens toward the south in direct violation of Vitruvius' injunction;⁶ but this is the case also at Athens and Syracuse.⁷

¹ *Wanderungen in Griechenland*, II, 117.

² *Baukunst der Griechen*, 211.

³ *Journal of Hellenic Studies*, XI, 294.

⁷ GEPPERT, *Altgriechische Bühne*, 94.

² *Bull. de corr. hellén.*, XIV, 248.

⁴ *Bühnenalterthümer*, 30, n. 2.

⁶ *De Architectura*, v. 3. 2.

At present the greatest height of the *cavea* above the orchestra-curb is 9.07 m.;⁸ its diameter measured from the highest point of the mound on either side is 81 m.; measured from the lowest step on either side, 24.88 m. The structure forms an arc of 186° , or somewhat more than a half-circle, and is thus less by 24° than Vitruvius' fanciful model for Greek theatres. The curve seems a perfect one through an arc of 159° , *i. e.*, to the point where the curb terminates. It is then continued on a straight line, tangent to the arc at that point. This was a device often employed in Greek theatres⁹ for the sake of the view of those who occupied the end seats. At Epidauros¹⁰ the same purpose was accomplished by the use of a different centre and radius, thus making the inward curve at the wings less abrupt. The *analemma* uncovered is of the same poros stone used for the seats and throughout in the whole structure. The wall follows the upward inclination of the *cavea* and is 0.62 m. thick at the bottom, narrowing to 0.57 m. at the highest point reached in the digging. At its lower end the base of a stele was discovered, lying in a line with the lowest step of the *cavea* and so at an obtuse angle to the *analemma*. It is rectangular, 1.14 m. in length and 0.62 m. in width. The hole sunk in the upper face to receive the stele is 0.79 m. long, 0.135 m. wide, and 0.12 m. deep. Doubtless the stele bore an inscription relating to the building or rebuilding of the theatre. The lines of the *analemmata*, if prolonged, would meet in an obtuse angle at a point between the centre of the orchestra and the proscaenium—another characteristic of the normal Greek theatre. The width of the east *parodos* is about 5 m. The proscaenium in its prolongation toward the east bends away slightly, as at Epidauros and Oropos. But we could not make sure whether this prolonged line was parallel with the *analemma*, or whether, as is most frequently the case, the inclination was such that the *parodos* became wider as it approached the orchestra. Neither was it possible to determine whether the *parodos* was closed by a door or doors, such as were found at Oropos, Sikyon and Epidauros.¹¹

The *cavea* is divided into eleven *cunei* ("wedges") by twelve flights of steps. This statement is founded on computation, for only

⁸ I am glad to acknowledge my indebtedness, for many of these measurements and for helpful suggestions, to Mr. John Pickard of the American School.

⁹ Cf. the theatre at Athens; for that at Peiraeus, see CURTIUS and KAUPERT, *Karten von Attika*, text, I, p. 67.

¹⁰ *Практика* for 1883, 47.

¹¹ *Практика* for 1883, 48; for 1886, 53.

three of these flights of steps were definitely located. According to Vitruvius,¹² the *cunei* should be seven and the stairways eight in number. But in Greece proper this rule is observed only at Mantinea. At Argos and Thorikos we find only three *cunei*. The number is generally greater than that given by Vitruvius.¹³ The eastern *analemma* is immediately adjoined by steps; this must have been the case at the other extremity of the *cavea* also. Such an arrangement is indeed almost universal. The *cavea* was not divided through the middle line by a line of steps, nor is it at Athens and at Sikyon. This division, despite Vitruvius, was, of course, a quite accidental matter, depending upon the number of *cunei*, whether even or odd. The stairway next the *analemma* is 0.72 m. in breadth at the bottom, narrowing with the second step to 0.68 m. Beyond this no exact measurement could be taken on account of the ruinous condition of the remains. The breadth corresponded approximately to that found in the theatres at Athens (0.70 m.), Epidauros (0.74 m.) and Thorikos (0.62 m.). It is considerably exceeded, however, in the steps of the the following flight, which measure 0.94 m., corresponding nearly to the 0.90 m. of the Peiraieus theatre. This increased breadth is natural for the interior, where every stairway gave access to two *cunei* instead of one. The height of the steps varied between 0.145 m. and 0.16 m.; to this must be added a decided upward slope from front to back. So far as could be seen, the level of seats and that of adjoining steps correspond only occasionally, the added height of four steps amounting to that of three rows of seats. This, I think, is quite exceptional. It is an almost invariable rule that every second step reaches the level of the adjoining seat. Only in the theatre at Athens does a single step, inclining upward from front to back, suffice for every row of seats.

The seats themselves vary greatly in dimensions. Those above ground on the upper part of the slope are 0.39 m. in breadth and 0.54 m. in height; those in the lowest row have, as a rule, the same breadth—sometimes 0.05 m. to 0.08 m. greater,—but are only 0.32 m. in height. In profile, there are only slight differences in measurement, not affecting the general pattern. This is a usual one for theatre-seats, and consists of a plane vertical surface reaching 1.05 m. below the upper surface and continued down to the bottom of the seat

¹² V. 6.2.

¹³ Cf. Athens, Epidauros, Sikyon, Peiraieus.

in a *cyma reversa* curve forming a hollow. The concave surface at its deepest point is distant 0.105 m. from a vertical line let fall from the upper outer edge of the seat. The seats are set level, and have a slightly raised band, 0.09 m. to 0.13 m. wide, running along the outer edge. The small breadth of the seats is, so far as I can find, quite unprecedented. Vitruvius' maximum and minimum are 0.7392 m. and 0.5914 m.,¹⁴ and his maximum is most often exceeded. In the theatre of Thorikos, which is very irregular, the average breadth is 0.60 m.;¹⁵ at Athens, it is 0.782 m., at Epidaurus 0.78 m., at Sikyon 0.75 m. to 0.85 m., at Peiraiæus 0.91 m. But it is to be noted that in all these theatres, except at Thorikos, only a small part of the breadth served as the actual seat; behind, the stone was hollowed to receive the feet of those on the next step above. The front part or seat proper is 0.332 m. wide at Athens, 0.35 m. at Epidaurus, Sikyon and Peiraiæus. These latter measurements harmonized better with the seat-breadth in the Eretrian theatre, and appeared to suggest that here the whole surface of the seat was given up to the actual occupant. Such was proved to be the case by further excavation. The seats are not so placed that one rests upon or touches the next, but are distant from one another radially 0.35 m. The intervening space, left for the feet of those who occupied the higher seat, is simply earth. Doubtless its level was below that of the seat in front, just as in theatres where one stone served as both seat and foot-rest. A *cavea* so constructed would be much less secure than if every row were supported immediately by the one below it; so that this detail of construction may account in a measure for the very imperfect preservation of the whole.

As to the difference in height (0.22 m.) of the upper and the lower seats, it may be remarked that, as the former were entirely above ground, a more exact measurement was possible. When the stone was set, some part of this excess of height would disappear, but surely not the whole. In fact, the entire height of one seat in the second row, whose lower edge seemed to have been reached, was only 0.42 m.; this would mean that the stone was sunk to a depth of 0.10 m. below the surface. In comparing the 0.32 m. of the lower rows with the seats of other theatres, we find: at Athens, 0.32 m.; at Epidaurus, 0.34 m.; at Sikyon, 0.35 m.; at Peiraiæus, 0.32 m.; at Thorikos, 0.35 m. Here, then,

¹⁴ MÜLLER, *Bühnenalterthümer*, 31.

¹⁵ *Papers of American School*, IV, 9.

is a comparatively exact correspondence, all the figures being below Vitruvius' minimum of 0.3696 m. Seats so low could hardly have been very comfortable; and, for the theatre at Athens, Dörpfeld assumes that the height was increased by the use of cushions. The same opinion is expressed by Kabbadias in his report of the excavations at Epidauros.¹⁶ But it is interesting to find that at Epidauros the seats above the *diazoma* reach a height of 0.43 m. If at Eretria the upper seats also were set down in the earth to a depth of 0.10 m., the actual height remaining would be 0.44 m., or almost exactly the same as that in the great theatre of Polykleitos. The inference would seem to be that the theatre at Eretria was divided by a *diazoma*, as would be expected *a priori*. The marble slab before referred to, discovered just behind the first row of seats, may have made part of the back revetment of the *diazoma*. It is 1.62 m. long, 0.795 m. wide, and 0.185 m. thick; near one corner on the short side is a hole for the insertion of a clamp that joined it to its neighbor. The *diazoma* was not infrequently revetted at the back with such plates of marble.¹⁷ Only further excavation, however, can make this point certain. Finally, beneath the lowest tier of seats was a single step, 0.77 m. wide, and rising gradually from front to back; immediately adjoining, 0.38 m. lower, is the broad drain skirting the orchestra.

THE ORCHESTRA.

The diameter of the orchestra, measured to the poros curb which skirts it, is 20.28 m.; to the lowest step of the *cavea*, 24.88 m. It is larger than that of the theatres at Peiræus (16.50 m.), Sikyon (about 20 m.), and Mantinea (21.70 m.); larger even than that of those at Athens (22.50 m.) and Epidauros (24.50 m.),—though in the last two theatres the size of the *cavea* is very much greater than at Eretria. The ratio of orchestra diameter to *cavea* diameter in the Eretrian theatre is an unusually large one. The orchestra was certainly unpaved. As late as 1886, Müller¹⁸ writes of the orchestra surface as *Fast ohne Aufnahme gepflastert*; he cites as exceptions only the odeum at Knidos and the theatre at Epidauros. But in the theatres at Peiræus, Oropos, Sikyon, Thorikos, Mantinea and Megalopolis, the orchestra surface has been found to consist merely of beaten earth. Kabbadias¹⁹ in his

¹⁶ Πρακτικά for 1881, Παράρτημα, 17.

¹⁷ Cf. the theatre at Sikyon, in *Papers of American School*, v, p. 11 (*JOURNAL*, v, p. 277).

¹⁸ *Bühnenalterthümer*, 37.

¹⁹ Πρακτικά for 1881, Παράρτημα, 19.

report of the work at Epidauros concludes that paving was not in use in the best times. The pavement of the orchestra at Athens, for example, is certainly of Roman date. Perhaps the converse of Kabbadias' proposition will not hold: that the lack of paving implies an early time; but it may at least be regarded as an indication. The orchestra was in part bounded by the line of curb already often referred to. This consists of large blocks of poros, bearing a slight projecting moulding on the outer (next the *cavea*) side. It is 0.42 m. in breadth and rises 0.395 m. from the drain or gutter outside it; thus it is nearly on a level with the lowest step on the other side of the drain. It rises very slightly from the middle toward the extremities, the resulting difference of level amounting to 0.067 m. On the outer side the curve is perfect; inside the blocks are not cut to the curve but are left straight. This makes it certain that the orchestra surface was at least as high as the level of the curb. The upper surface of the stylobate of the proscenium-wall is 0.38 m. above the curb, and it is this stylobate which we might expect to determine approximately the level of the orchestra, which, if just high enough to conceal the lower edge of the stylobate, would be about 0.25 m. above the surrounding curb. The joinings of the curb are everywhere perfect, and the workmanship good. It extends through an arc of 159° , thus falling short of the angular measurement of the *cavea* by 27° . Therefore, for a distance of 5.35 m. at each end, the lowest step of the *cavea* immediately adjoins the earthen surface of the orchestra. At a distance of 1.62 m. from its extremities the curb narrows abruptly (at the jointing of two stones) to a breadth of 0.25 m. The narrowing is all on the inner side; the moulding and the curve on the outside continue unbroken. Finally, it is joined with the lowest step of the *cavea* by a radial cross-wall of the same pattern, 0.29 m. in width.

The sunken drain or passage left between the curb and the lowest step is 1.88 m. wide at the middle, increasing very gradually to 1.90–1.91 m. at the eastern extremity; it is well paved throughout with poros. That it served as a drain was made sure by the discovery, outside the cross-wall, of a conduit of pottery. This was very small (0.235 m. wide, 0.15 m. deep), and consisted of a flat plate bent to form a rectangular prism; it was open above and lay somewhat below the level of the *cavea*-drain. A hole was discovered piercing the cross-wall at the bottom, through which water might pass into the outer conduit. This conduit extended toward and under the stage-structure, bending

gradually toward the east. This whole plan and arrangement is closely similar to what was found at Epidauros. At Athens the orchestra is surrounded by a drain, which is, however, much narrower (0.90 m.) and deeper; so that bridges were necessary in the line of every stairway. The same narrow and deep canal with a succession of bridges, is found at Sikyon and at Peiraieus; at Megalopolis its dimensions are about the same, but the bridges, if there ever were any, have disappeared. In every case the drain is carried on in some way under the stage-structure. At Epidauros, the narrow gutter is replaced by a broad and shallow paved passage, very nearly corresponding in its measurements to that at Eretria. A curb with similar moulding bounds it on the inside, and at about the extremities of a diameter parallel to the proscenium are cross-blocks uniting the curb with the lowest step of the *cavea*. These are pierced each by two apertures affording an outlet into a subterranean drain which runs away under the stage-structure. At Epidauros, however, the circle of the curb is made complete instead of being interrupted at the cross-walls. As Kabbadias suggests,²⁰ Polykleitos' great work might well have served as a model to later designers. The theatre at Aigina, according to Pausanias,²¹ resembled it in size and structure.

I have already noted the existence of three ill-made and ruinous cross-walls in this drain. The first lies about 0.50 m. to the east of the middle point of the curb, is 1.60 m. long, 0.37-40 m. wide, and 0.35 m. high. Space enough is left between each end and the adjoining side-wall of the drain, for water to pass freely. The second, 5 m. further toward the east, is of about the same length and height, but slightly wider. The third, lying 3.65 m. from the second and 3.90 m. from the cross-curb at the end, extends but half-way across the drain, and is very much wider (0.85 m.) than the other two. My first thought was that the cross-walls had served to support bridges corresponding to the stairways. But they lie at such irregular intervals that this could hardly have been the case (the distance between adjacent stairways along the lowest tier of seats is 3.29 m.); and in any event bridges so short would not have needed a continuous support. It seems most reasonable to suppose that the drain was in later times completely covered, and that the cross-walls made the foundation for such covering. They appear to be late, and from their height would be very well suited to

²⁰ Πρακτικά for 1881, Παράρτημα, 29.

²¹ II. 29, 11.

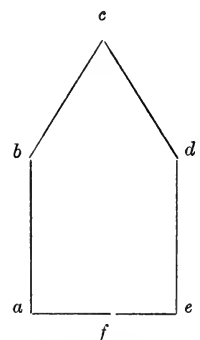
the object suggested. The reason of this covering may have been to obtain space for a row of marble chairs or thrones. If the chairs were not here, they could have had no other place except within the orchestra itself, where they are found at Oropos, just across the Euripos from Eretria, but, I think, nowhere else in Greece. The two theatres might very well have been similar in this respect. The fragments of thrones which were found seem to shed light on the matter. All along the course of the drain were unearthed large and small pieces of marble which certainly belonged to thrones. Finally, at the east end, the back of a throne was found entire, lying on the poros pavement of the drain. It corresponded in style and measurement to the smaller fragments. In addition, we discovered, as already noted, near the centre of the orchestra, at the north end of the subterranean passage, the arm of a marble chair, lying about 1 m. below the ancient level of the orchestra. It differed entirely from all the rest in dimensions and pattern. Mr. Leonardos, the superintending Ephor at Eretria, judged it of earlier and better work than the more numerous fragments. It may have belonged to a period earlier than the construction of the underground passage, and at this earlier time the thrones may have stood within the orchestra, as at Oropos. In the construction of the passage a deep trench must have been sunk and naturally prolonged somewhat beyond its northern extremity; in the hole thus left this fragment of a throne might well have been buried together with other *débris* from the old structure. I should ascribe the later thrones to the period of rebuilding thus indicated; these might then have been placed over the drain which was covered to receive them. But all this is a matter of conjecture from very incomplete data.

The arc of the orchestra, if taken at the poros curb inside the drain, just cuts the line of the later proscenium, but falls short of the heavy front-wall of the older stage-structure. The curve of the lowest step, if prolonged, cuts the earlier wall as well. This latter circle is the basis of Vitruvius' plan; and in this respect the theatre at Eretria, like most others, chances to accord with the Roman architect's theory.

THE UNDERGROUND PASSAGE.

The position and direction of the underground passage have already been described. Its total length is 13.09 m.; breadth at the bottom (*a-e* in section) 0.89 m.; height (*c-f*) exactly 2. m. It is formed of two tiers of very large blocks carefully fitted together, no one of

them varying in length so much as 0.05 m. from 1 m. The stones of the lower course are set vertically and are 1.10 m. high (*a-b*, *e-d*). With the second course (*b-c*, *d-e*), the two side walls come together, making an angle at the top of 60° . There is no cap-stone, and nothing of the arch-construction; the stones rest against each other merely by the contact of their inner uppermost edges, and the outer edges, which might otherwise project above the level of the orchestra, are cut away so as to lie just beneath the old surface. The passage is covered in this way along 11.03 m. of its entire length. At both ends the last stone of the upper course on each side rises vertically, instead of sloping to meet its fellow. These stones vary slightly in dimensions. All are 0.85 m. in height; but, at the north end of the passage, the block on the east side is 1.07 long, its opposite 0.99 m., and at the stage end,



Section of Subterranean
Passage.

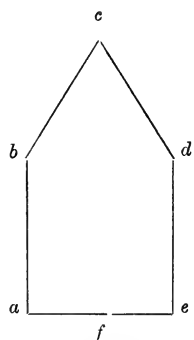
the one to the east is 1.03 m., that to the west 1.08 m. long. These differences are scarcely noticeable except on actual measurement. At the north end every stone is 0.15 m. wide at the top; at the stage end the total width is 0.33 m., but on the inside there is a sunken ledge 0.05 m. deep and 0.15 m. wide. This disposition was evidently planned to receive a trap-door which should cover the opening. At the north end there is a suggestion of an intended covering in two small cavities corresponding to each other in the last two stones that are joined to roof the passage; but it is difficult to see just how these cavities could have contributed to the purpose in question.

Thus was afforded entrance to the passage at the centre of the orchestra and just behind the *proscenium*. It was facilitated by steps constructed in a noteworthy and unusual manner. At either end a huge block of poros was set in, resting on the same level as the side stones of the lower course, and corresponding to them in height. It was so wide that its middle portion could be cut into steps equal in breadth to the passage, while the side portions thus left standing free bounded the continuation of the passage in the line of the regular blocks of the lower course. This block furnished three steps. Upon it and between the vertical side stones of the upper course, which form the opening, was placed another huge block, which was cut out in three more steps in the same way. Thus a stairway was formed

extending from the upper outer corner of the vertical side stones to the bottom of the passage. At the stage end all these six steps are perfectly preserved; at the north end only the lower block, with its three steps, remains. The missing portion, however, may easily be restored. The line of inclination of the lower steps, prolonged by the length of a second block, exactly reaches the corresponding corner of the upper side stones. It is, of course, possible that the missing steps may have been of wood, or for some reason may not have been necessary at all. The steps at the stage end are 0.83 m. long; at the north end 0.87 m.; in both cases 0.12 m. less than the width of the blocks in which they are cut. A ledge 0.06 m. wide is thus left on both sides of the steps. The steps are 0.17 m. wide and 0.27 m. high. The lowest is about 0.50 m. above the original soil which formed the floor of the passage. No trace was discovered of paving. At each entrance the lower exterior edges of the slanting roof-blocks are splayed to afford easier entrance. The passage is now lighted by a vesica-shaped aperture in the roof, 1.24 m. long and 0.35 m. wide, distant from the north end 3.34 m. I do not feel sure that this is not an accidental breaking away; but the roofing seems too firm at every other point to make this probable. No mortar was used in the construction of the passage, and the workmanship throughout is excellent. I owe to Dr. Dörpfeld the judgment that the whole is Greek and belongs to a good period.

What, then, was the purpose of this passage? If it had been a drain, it would surely have extended further, under and beyond the stage-structure; moreover, it is very much larger than a drain need have been. It is thus clear that its object was to make a way by which passage could be had unseen from behind the proscenium to the centre of the orchestra, or *vice versa*. It would thus supply the means for chorus or actors to appear suddenly in view of the audience in the orchestra, or to disappear just as suddenly. The notion that the passage was ever used by the chorus, may be dismissed. One of the most essential purposes of the *parodoi* was to furnish for the chorus an entrance to the orchestra. The effect produced by their appearance one by one from below would have been ridiculous. Extant plays and *scholia* afford abundant evidence to prove the impossibility of such a conception. The purpose of the passage, then, was to allow the actors to pass between the orchestra and their dressing-rooms in the rear of the proscenium. After his appearance, the actor may have kept his place in the orchestra or ascended a raised stage such as Vitruvius describes.

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An important fact to be noted is that such a passage could have been employed only in particular cases. An actor who is represented as coming from palace or city or some foreign land could not possibly appear before the audience as if rising suddenly from the depths of the earth. Such an apparition must actually be a being from the lower world, imagined as returning to the light of day. The manner of entrance would be so clearly seen by the audience and would be so notable that it must at once suggest such an apparition. The device can have had no cause for existence, if it was not to contribute to what we call stage-effect, to heighten illusion; but illusion would have been utterly lost if an actor who came to herald the return of a king from Troy had been seen emerging from the earth.

Extant tragedy furnishes examples of such appearances. In the *Persians* of Aischylos, the chorus is urged by Atossa (v. 619, *seq.*) to call up the spirit of Darius. The chorus then accompany her libations with a long hymn of supplication to Darius and to the powers of the lower world (vv. 621-671). In v. 656, the King is implored: *ἰκοῦ τόνδ' ἐπ' ἄκρον κόρυμβον ὄχθου*. Darius appears. He first addresses the chorus, telling them how he has seen Atossa *τάφον πέλας* (v. 675), and has received her libations, and he further bids the chorus: *ὑμεῖς δὲ θρηνεῖτ' ἐγγὺς ἐστῶτες τάφου* (v. 677). They have just called on him to rise above the mound that covers his tomb; now he finds them standing close by the tomb. He must appear therefore in the midst of them, and surely from below. The difficulty of placing the tomb upon the stage and grouping the chorus there instead of in the orchestra has always been evident. Such a passageway as that at Eretria would enable the actor who personated Darius to make his appearance much more naturally, from beneath the actual surface of the earth and in the midst of the chorus.

If we are to believe that actors as well as chorus had their places in the orchestra, the final catastrophe of the *Prometheus Bound* may have represented the disappearance of Prometheus and the Oceanides beneath its surface. They must, from the play, have shared the same fate, and together, whether in orchestra or on a stage. At Eretria the entrance to the passage is so small that its use by so large a group would certainly present great difficulties. It is possible also that in Sophokles' *Philoktetes*, and Euripides' *Kyklops*, the passageway may have served as the cave which made part of the scene. This, however, may well be deemed doubtful, and the best evidence is furnished by

the first two plays cited. The *steps of Charon* mentioned by Pollux (iv. 132) have appeared to us clearly for the first time at Eretria. Pollux's description of this part of the scenic adjuncts runs as follows: αἱ δὲ χαρώνειοι κλίμακες, κατὰ τὰς ἐκ τῶν ἐδωλίων καθόδους κείμεναι, τὰ εἶδωλα ἀπ' αὐτῶν ἀναπέμπουσιν. This gives but a confused notion of the position of the steps, and various opinions have been held on this point. But if we are to accept Pollux at all, and his is our only authority on the matter, these steps could surely have had no connection with a stage. The meaning of κατὰ τὰς ἐκ τῶν ἐδωλίων καθόδους is obscure, but seems as well suited to the situation of the steps in the Eretrian orchestra as to any other point in the orchestra. It is interesting to find Müller²² supporting his view, that the steps in question led up to the stage through some sort of trapdoor, with the words: *Man beachte auch, dass die Orchestra im griechischen Theater keine unterirdischen Gewölbe hatte wie sie sich im römischen Amphitheater finden.* Wilamowitz²³ seems almost to anticipate the discovery made at Eretria. Discussing the *Persians*, he writes: *Es ist mitten auf dem Tanzplatz eine Bühne, Estrade ist dem Deutschen wohl deutlicher, deren Stufen zu anfang die Sitze des Rathhauses, weiterhin die Stufen des Grabmonumentes vorstellen: aus ihr kommt Dareios hervor; der Schauspieler der als Bote bis 514 sprach, hat also Zeit und Gelegenheit gehabt, sich bis 687 umzukleiden und unter die Estrade zu gelangen: wie das geschicht ist nicht überliefert, und der Philologe kann sich das nicht reconstruiren.*

A further question involves the relation between these steps and the ἀναπίεσματα. Pollux says of the latter (iv. 132): τὸ μὲν ἐστὶν ἐν τῇ σκηνῇ ὡς ποταμὸν ἀνελθεῖν ἢ τοιοῦτόν τι πρόσωπον, τὸ δὲ περὶ τοὺς ἀναβαθμούς ἀφ' ὧν ἀνέβαινον ἐρινύες. Perhaps the ἀναβαθμοί are identical with the *steps of Charon*, and with the steps found at Eretria; the Erinyes, as beings of the lower world, would naturally ascend in such a way. The ἀναπίεσματα proper may then have involved only some additional machinery to be used in connection with the steps and passage.

If the underground passage at Eretria did serve the purpose described, it would be most natural to expect something similar in other theatres. Mr. Penrose²⁴ has suggested that the drain-canal in the theatre in

²² *Bühnenalterthümer*, 150, n. 4.

²³ *Die Bühne des Aischylos*, *Hermes*, xxi, 608.

²⁴ *Journal of Hellenic Studies*, viii, 272.

Athens may have been used also as a concealed way from one side of the stage to the other ; but, even if this were possible, the case would hardly be a parallel one. Clearer evidence however has recently come to light. Shortly after our work at Eretria was finished, news came that the Germans had made a similar discovery at Magnesia. The passage there, Dr. Dörpfeld informs me, has about the same extent and direction as ours, except that at the orchestra end it branches at right angles in both directions, thus taking the form of the letter T. At Magnesia, however, no steps have been discovered, and the opening into the orchestra is barely large enough for a man to pass. At Tralleis, also, there is a less perfect example. But both these passages, Dr. Dörpfeld thinks, are of Roman construction. He tells me, too, that the excavations at present in progress at the theatre of Argos have disclosed what seems to be something of like nature. More important than all these, however, is the evidence afforded by the theatre at Sikyon, where some supplemental excavations have been made during the past summer by Dr. M. L. Earle, a former member of the American School, who superintended the investigations at Sikyon in 1887.²⁵ Dr. Earle's preliminary report will be found below ; but I may touch briefly on the point most interesting in this relation. This is the stairway, in the theatre at Sikyon, which leads down into the subterranean passage just behind the late proscenium. The stairway seems to belong to the same period as the passage, which appears to be of Hellenic work. At the orchestra end there are no steps ; but here the passage widens out so as to make a much more spacious entrance than at Eretria. These two facts taken together with the great height of the passage, which would be unnecessary for a mere drain, go to prove that the purpose of the passage was the same as at Eretria. In all probability it served also as a drain ; but the two uses are not incompatible. It is certainly noteworthy that such closely similar discoveries have been made in theatres so far apart as the sites in Peloponnesos and in Euboea. With the progress of excavation in all parts of Greece and in Greek lands, further light may be expected with confidence.

CARLETON L. BROWNSON.

American School of Classical Studies,

Athens, October, 1891.

²⁵ *Papers of American School*, v, p. 20 (*JOURNAL*, v, p. 267 seq.).

PAPERS OF THE AMERICAN SCHOOL OF CLASSICAL
STUDIES AT ATHENS.
SUPPLEMENTARY EXCAVATIONS AT THE THEATRE
OF SIKYON, IN 1891.¹

The results of the supplementary excavation of the subterranean structure in the theatre of Sikyon, conducted from July 27 to August 14, 1891, may be summarized as follows :²

The underground passage, which has been called *ὑπόνομος*, at present in the form of a trench with vertical sides, begins in the orchestra near the middle of the semicircular conduit below the seats of the *cavea*, and runs to a point about midway between the walls *D* and *E* of the stage-structure (JOURNAL, vol. V, pl. IX). Through most of the orchestra it cuts the native white clay; but from the space marked on the plan as "excavated below the level of orchestra" to the point between *D* and *E*, it is cut through a crust of rock to the clay soil beneath. From just in front of the wall *B* (toward the orchestra), the sides of the *ὑπόνομος* are sheathed with slabs of stone; this construction is continued through the orchestra to where the *ὑπόνομος* is met by a gutter cut in a single block of stone, which projects about half a metre into the orchestra from under the lower of the two courses of stone that form the outer boundary of the semicircular conduit. In the stone facing between *A* and *B* is set a flight of five steps of soft native stone, constructed, in part at least, of architrave-blocks. This stairway, which occupies the entire width of the *ὑπόνομος* and descends in the direction of the orchestra, terminates abruptly about half a metre above the bottom of the *ὑπόνομος*, thus leaving a free space, evidently intended for the passage of water. Under the stairway the *ὑπόνομος* is floored with stone slabs. How far forward into the orchestra these run it is impossible to say, owing to incomplete excavation. They certainly appear in the line of the wall *KK*, which has no structural connection with the *ὑπόνομος*. The depth of the *ὑπόνομος* varies from about 2.25 m. between *D* and *E* to about 1.85 m. between *A*

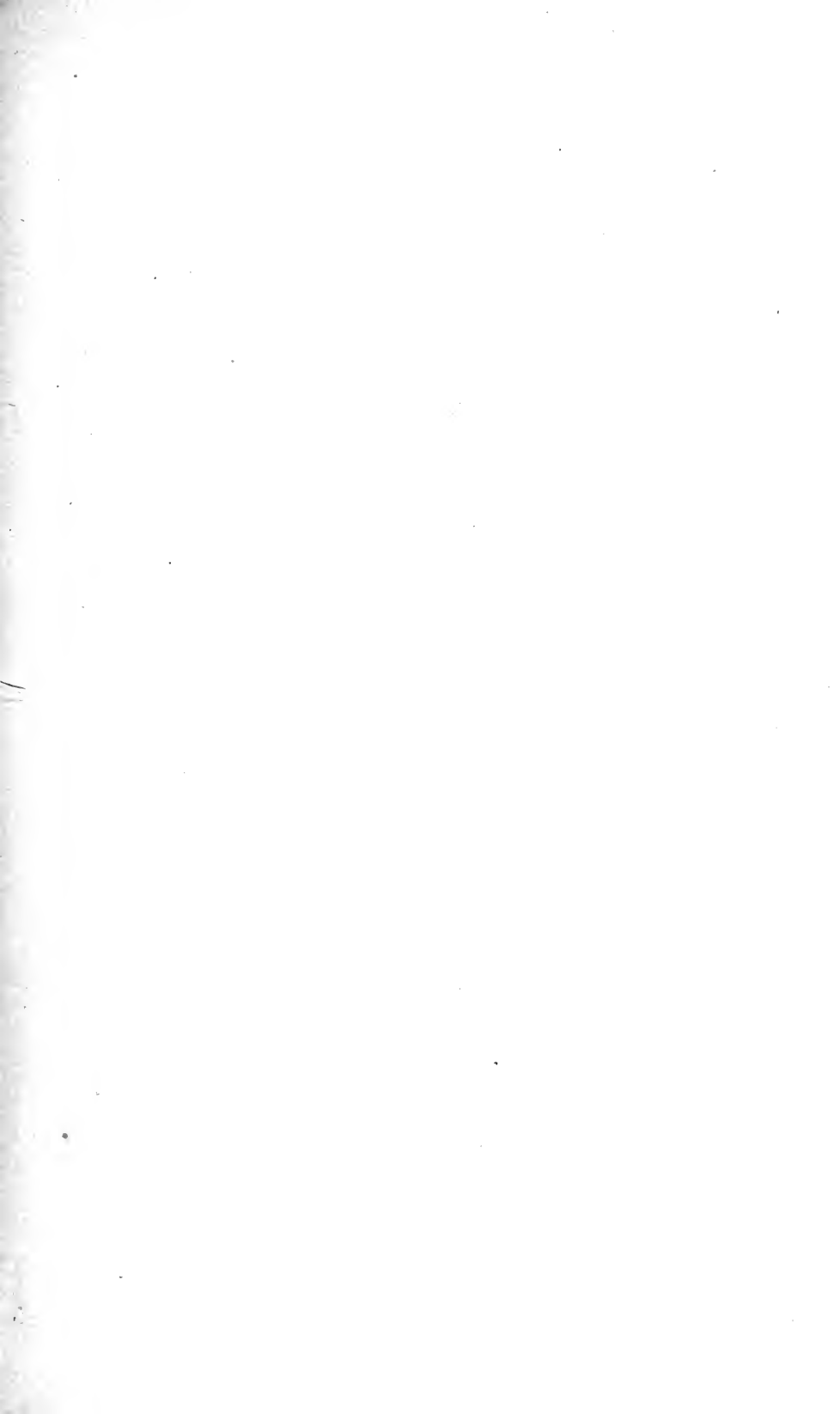
¹ *Papers of the American School at Athens*, V, p. 20 (JOURNAL, V, pp. 267-292).

² A detailed report, with plans, will be published later.

and *B* and at *KK*. Its width is about 0.56 m. between *D* and *E*, and 0.69 m. between *A* and *B*. At about the centre of the orchestra, the *ὑπόνομος* widens to about double its average width, and forms a cubical tank, with a clay bottom, 1.30 m. square and deep. Beyond this its breadth decreases gradually from about 0.60 m. to 0.30 m., where it meets the gutter mentioned above. The *ὑπόνομος* was originally covered, except over the stairway, with slabs of native conglomerate. It is continued beyond the theatre by a tunnel in the rock, about 1 m. high, which apparently meets one of the numerous subterranean waterways of the plateau.

MORTIMER LAMSON EARLE.

Barnard College,
Nov. 27, 1891.





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2

INTRODUCTION OF GOTHIC ARCHITECTURE INTO ITALY BY THE FRENCH CISTERCIAN MONKS.

III. CHIARAVALLE DI CASTAGNOLA,

[PLATES XII, XIII.]

The filiation of the monastery Castagnola is Cîteaux—La Ferté, 1113—Locedio, 1124—Castagnola, 1147. It was taken possession of by the Cistercian monks on January 14, 1147. Locedio, its foundress, was situated in Piedmont, not far from Vercelli, in a region that was under direct French influence. Castagnola itself was at a great distance, in the Marches of Ancona, not far from the Adriatic coast, in the diocese of Sinigaglia, five miles from Jesi. A number of authorities place an earlier monastery on this site, but do not agree as to dates. The various opinions are given in Janauschek, *Orig. Cist.* p. 91.¹

The monastic buildings have been entirely destroyed or remodeled; only the church remains, and it also has suffered in its apsidal chapels. It is at present called Santa Maria di Castagneto with the variant Castagnola: the ancient name was Castaneola.

The church appears not to have been commenced at the time of the advent of the Cistercian monks. Two inscriptions remain to give its

¹ *Castaneola, in jucunda et fertili planitie ad Aesium fluvium in marchia Anconitana et dioecesi Senogallienensi sita et quinque milliaria ab Aesio, duo a mari distans, ex inscriptione columnae in loco quodam erecta est, in quo jam a. 1125 ecclesia exstitit; quo autem fundatore illa et posteriore aeo monasterium condita sint, tenebris obvolutum jacet. Aliis ad Theodolindam reginam originem coenobii, quod a Benedictinis monachis ante habitatum esse contendunt, referentibus Leonus (ex Tarquinio Pinaoro) eam Mathildi comitissae et saeculo XI tribuit, Horatius Avicenna (apud Lubinium) S. Bernardo; Augustinus ab Ecclesia coenobium mox post a. 1123 ortum esse statuit, Jongelinus (JC. JO. Bo. St.) a. 1126 (fortasse errore typi pro 1146), Vischius 1127; ceterae vero chronologiae et plures et praestantiores monachos Cistercienses XIX Cal. Febr. 1146 i. e. XIV Jan. 1147 (Ha) introductos esse constanter tradunt (P. B. Bi. Du. Pa. M. W. He. Vi [IX Cal. Feb.]. V [iterum, prid. Cal. Aug.]. Si. N. Bl. Ve. F. 1145: A. R. E. EM., L. La.). Mater Castaneolae nulli episcopo subjectae Locedium (de Linea Firmitatis) erat, primus abbas Oddo, filia S. Severus. (Manr. 1146. XII. 1. 6.—Jong. II. 77. N. 45; cf. Origg.—Douschon.—Mart. Thes. IV. st. 8. a. 1230; 33. a. 1281.—Moroni XI. 169.—Aug. ab Ecclesia 313.—Lubin 90. 225.—Amatori Pic. 3.—Rampoldi I. 658.—Leoni II. 150.—Lucentius I. 284.—Adrianus p. XXXVII. N. 3.—Annot. Cl. Dom. Leonis Nardoni commun. cum auct.).*

date, one in the porch and the other in the apse. The first is on the wall of the main façade to the left of the central doorway, and gives the date 1172: *Anno Domini aedificata MCLXXII*. The second is inscribed on the capital of the engaged pier in the transept to the right of the apse. Its great height and a hanging drapery prevented a perfect reading: *Anno milleno centeno nonogeno deno mixti demonstrant*.

The period 1172–1192 may be safely taken as that of the construction of the church, which is the earliest in date of the Gothic Cistercian constructions in Italy, so far as I am acquainted with them. It is not entirely unknown, but has been mentioned and partially illustrated by Agincourt,² Schnaase,³ Mothes,⁴ Dehio and Bezold.⁵

² *Histoire de l'Art*, pls. XXXVI, figs. 23–25; XLII, 5; LXIV, 13; LXVIII, 33; LXX, 10–11; LXXIII, 17, 31, 41, 43; these illustrations are so small as to be useless. Text quite useless.

³ *Geschichte der bildenden Künste*, VII, 87. SCHNAASE says: *In vielen fällen war es auch hier der Orden der Cistercienser, der seit der mitte des XII. Jahrhunderts das Beispiel französischer Formen gab. So in der Kirche zu Chiaravalle zwischen Ancona und Sinigaglia, welche vielleicht wenige Decennien nach der Gründung (1173) mit gegliederten Pfeilern, spitzbogigen Arcaden, durchgeführten Kreuzgewölben und gleichen rundbogigen Fenstern emporstieg, und auch in der Schmucklosigkeit der Kapitüle vollkommen den französischen und deutschen Kirchen des Ordens aus dieser Zeit entspricht. Die Fassade, die ächt italienisch nur mit dem Portale, der Fensterrose und einem zweitheiligen oberen Fenster ausgestattet ist, beweist auch hier, wie diese Brüder trotz der Anhänglichkeit an die Gebräuche ihres Ordens im Interesse anständiger Einfachheit sich überall die Landesformen anzueignen wussten.*

⁴ *Die Baukunst des Mittelalters in Italien*, p. 440: 1172 wurde in dem damals kastanienreichen Thal von Jesi in der Mark Ancona, von Mailand aus, ein zweites Kloster Chiaravalle (di Castagneto) gegründet. Der Grundriss zeigt im Langschiff 6 Joche, die nach dem Quadrat der Seitenschiffe bemessen sind, eine Vierung mit Kreuzarmen, welche um ein Joch über die Seitenschiffe vorspringen und ein quadratisches Chor. Die Pfeiler sind quadratisch mit angesetzten Halbsäulen, welche zum Theil Würfelcapitüle, zum Theil aber abgekantete Trapezeapitüle haben, die fast zu schlichten Kelchcapitülen werden und an Pal. Dandolo-Farsetti in Venedig erinnern. Die Querbögen der Seitenschiffe sind rund und tragen Biforien. Die Arkaden sind nur sehr stumpfe Spitzbögen, die Querbögen in Mittelschiff ebenfalls, während die Schildbögen auf der Arkadenmauer ziemlich spitz sind. Alle Fenster sind rund, sämtliche Details noch romanisch, das Constructionsprincip schon beinahe völlig gothisch. Der Westgiebel aber erstreckt sich noch in alter Weise über alle drei Schiffe und hat sogar ein Fussgesims, welches von einem Kreuzungsbogenfries gestützt und von einem gekuppelten Rundbogenfenster unter rundem Oberbogen durchschnitten wird.—Da nach dem technischen Befund höchstens die Mittelschiffgewölbe später sind, so haben wir hier ein sehr frühes Beispiel von vorwiegender Anwendung des Spitzbogens durch lombardische Meister, etc.

⁵ *Die Kirchliche Baukunst des Abendlandes*, pl. CXCVI, 5, 6. There is as yet no mention of our building in the text of this work, which has not yet been issued so far as the early Gothic period. The two illustrations are sections of the interior.

EXTERIOR (PLATE XII, 1).—The church is entirely built, not of the brown stone or travertine generally used by the Cistercians, but of brick, without any of the polychromy so generally seen in the churches of Lombardy. The general effect is plain but symmetrical, especially in the broad lines of the front. The porch and bits of the walls of the aisles and transept are disfigured by stucco: the same may be said of the tower, over the intersection, which also seems to have suffered from restoration. The wheel-window is covered with glass on the outside. The use of brick instead of stone makes Castagnola an exception, almost an anomaly, in the Cistercian architecture of Italy.⁶ It is a sign of Italian influence from the North of Italy: probably Locedio furnished its prototype both in material and in form.

The façade is simple. Its rather low gable embraces in one uninterrupted line the aisles as well as the nave, and rises to a considerable height above the roof, forming a screen. A similar device to give the effect of height is used at the ends of the transept and apse. The cornice of the gable is moderately heavy and rich and is capped by a small turret on the summit and at each end. A similar cornice forms the base of the gable and is interrupted in the centre by a two-light round-headed window, recessed, with a diamond-shaped oculus between the lights which are separated by a slender octagonal pillar. Under the cornice and window runs a decoration of interlaced round false arches—a feature common to many Lombard churches of the XIII and XIV centuries in a richer form. The middle story of the façade, whose edges are framed by a projecting strip, is broken only by the central wheel-window. This window is constructed of a fine-grained stone: its outer mouldings are heavy and effective. In the centre is a quatrefoil in a circle on which rest twelve radiating colonnettes with bases and capitals on which rest as many moulded round arches: the arches do not intersect as in later examples. For a discussion of the wheel-window I refer the reader to vol. VI, pp. 23–26 of the JOURNAL in the article on Fossanova.

The lower story is occupied entirely by an open porch whose roof touches the wheel-window. This porch has five round arches on the front and one on each end. The original intention was to have the central and the two outer arcades of equal span while the two others

⁶ The Italian Cistercian churches are usually built of the stone of the region and, wherever possible, of travertine. Brick is used in a few instances faced with stone: e. g., at San Galgano near Siena, 1208–1248.

should be narrower and lower, but the left-hand outer arch, which has suffered injury, has a wider span than the others. These arches are entirely without mouldings, and are separated from their piers merely by a string-course. The interior of the porch is covered by unribbed cross-vaults separated by thin round arches. On the side of the façade the engaged piers are heavily recessed though not moulded. The doors leading into the church are round-headed.

Over the intersection rises a simple square tower, of one story and with a large round-headed single window in each side, crowned by a low pyramidal spire. The windows in nave and aisles are simple round-headed openings. The most important feature of the exterior is its system of buttresses. They are more prominent than in any of the other Italian Cistercian structures, in which the Romanesque buttress-strips continue to be used. They project vertically about two feet, and rise about three feet above the roof of the aisles. An examination of the buttress on the left side near the front appeared to show that these were originally *flying* buttresses, the space between them and the roof being afterward filled in for greater strength. The buttress nearest the transept is much higher than the rest, and abuts against the upper part of the vault of the central nave. The reason for this appears to have been the weight of the central tower. This buttress is now solid, but it is easy to see, even in the plate, the outline by which the later filling-in is separated from the original flying buttress. The existence of the flying buttress in this Italian structure of 1172 is all the more important to note because there are not more than three or four examples known in the entire country,⁷ and none so early. But, furthermore, in France itself this peculiarly Gothic feature began to be used only a decade or two previously, at the very close of the transitional style.

INTERIOR (PLATE XII, 2).—Although the effect of the interior is sadly marred by a coat of stucco, the structure has remained practically untouched. The exception is the destruction of the two oblong chapels on the right of the apse, and the remodelling of one of those on its left. The plan (PLATE XIII, 3) is the same simple Cistercian formula carried out in most Italian examples: a Latin cross with a square apse

⁷ In my review of Mr. Moore's book on Gothic architecture (vol. vi, p. 150), I mentioned flying buttresses at S. Francesco, Bologna (1236-45); Sta. Chiara (1258) and S. Francesco, Assisi (1232-53); and probably Sta. Corona, Vicenza.

flanked by two square chapels on either side.⁸ None of the vaults are on a square plan except that covering the intersection. The dimensions are only slightly smaller than at Fossanova and Casamari, and slightly larger than at S. Martino near Viterbo. The total length is under 60 met. ; the width under 20 met. The side-aisles measure, between the centres of the piers, 6.50 met. E. to W. along the axis of the church, and 4.15 met. N. to S. : the nave is a little wider than at Fossanova, measuring c. 10.50 met. between the axes.

In the construction of the ribbed cross-vaults which cover the entire church the principles of primitive French Gothic are carried out as strictly and purely as in the buildings of the Ile-de-France erected between 1130 and 1160. The pointed cross-vault, the pointed wall-ribs, the pointed spanning arches, are such as we find in Northern France, but have not expected to find anywhere in Italy. The diagonal ribs consist of a simple torus-moulding supported on an engaged column with plain cubiform capitals. Between them is a large engaged column to support the spanning arch. The proportions of the pointed arches of the nave and of the spanning arches are low but remarkably symmetrical ; the wall-ribs are more sharply pointed. None of the capitals are foliated, probably on account of the exclusion of sculpture owing to the general use of brick. They are usually concavely cubic, almost bell-shaped, sometimes trapezoidal in shape. The section of the piers engaged in the walls of the aisles is that of half the main piers of the nave, as in PLATE XIII, 2.

The architecture of this building seems to be not purely French. The exterior is decidedly Italian in its feeling, proportions, and decoration ; the interior even more characteristically French. I would suggest that—it having been decided to try the experiment of the ribbed and pointed cross-vaults, perhaps never seen in Italy before, at least not so far south—the interior was placed under the supervision either of a French Cistercian architect or of an Italian thoroughly trained in the new principles of the Ile-de-France.

In a previous paper, I hazarded the remark that the French Cistercian buildings in Italy were sometimes as far advanced as contemporary work in France. Since then, I have had occasion to modify

⁸ It is curious that Dehio and Bezold in their ground-plan give three chapels on each side in place of two. I knew of no Cistercian church in Italy with six chapels : they appear never to have been introduced from France, though they appear in Germany.

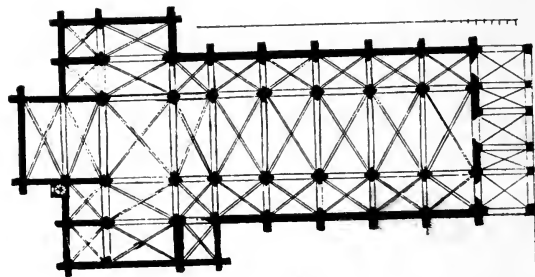
that opinion by examining the evidence concerning the rise of the Gothic in GONSE's monumental work, *L'Art Gothique*, which gives, without any comparison, the best and even the only complete account of the various phases of the development of early Gothic vaulting beginning in about 1090. While Mr. Moore in his *Gothic Architecture* mentions no monuments between Morienval in 1090 and St. Denis in 1140, M. GONSE describes over thirty, scientifically grouped in series and affording material for one of the most perfect demonstrations I have ever read. The Cistercians took part in the movement at least as early as 1140 (S. Martin, Laon), and probably soon after the middle of the century began to spread beyond the limits of the Ile-de-France the use of the pointed ribbed cross-vault which was revolutionizing architecture. The question that concerns us is: When did they bring it to Italy? Is Chiaravalle di Castagnola, in 1172, the first building to embody the new principle? Of the two writers who have mentioned the church—SCHNAASE and Mothes—the former has understood its French origin, though he dates it too late, the latter makes the absurd claim of *German* influence acting upon a Lombard architect. Mothes, being unacquainted with the history of the monastery and apparently misled by the identity of name, asserts that Chiaravalle di Castagnola was founded from the Milanese Chiaravalle; and he is thus led to fancy more Lombard influence than exists. It is not likely that he could point to a single earlier instance of the use of this form of early Gothic cross-vault in Germany, from which these at Castagnola could have been derived.⁹

A. L. FROTHINGHAM, JR.

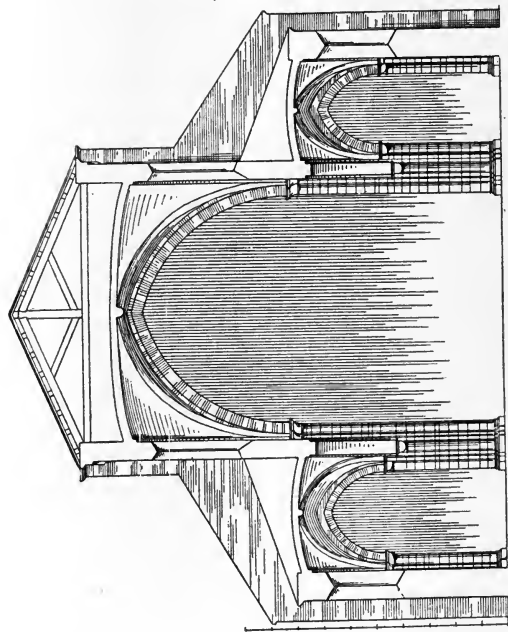
Princeton University.

October, 1891.

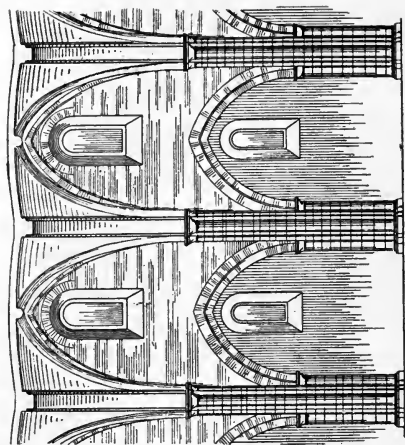
⁹Since writing this paper I see in the *Repertorium für Kunstwissenschaft* (1891, xiv, p. 506) that G. BEVILACQUA has contributed to the *Nuova Rivista Misena* (vol. III, 1890) an article on Chiaravalle di Castagneto; he misreads the second inscription, apparently, and dates it 1119.



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1

REVIEWS AND NOTICES OF BOOKS.

OSCAR BIE. *Kampfgruppe und Kämpfertypen in der Antike.* 8vo, pp. 160. Berlin, 1891.

The writer divides his material into two parts, viz., representations of fighters, first, in series or lines, and, second, in groups. The former are epic in character, Oriental in origin, and realistic in spirit. The latter, the result of an idealistic tendency, were an original product of the artistic genius of the Greeks. The combination of the two classes in Hellenistic times is viewed as a conflict of fundamentally contradictory principles; in Roman imperial times the Oriental principle gained the upper hand. Though the reviewer commends the skill with which the author has traced the development of types within the second class of monuments, he cannot assent to his main propositions.—K. WERNICKE, in *Deutsche Literaturzeitung*, 1891, No. 27.

M. HÉLÈNE. *Le Bronze.* Ouvrage illustré de 80 vignettes (Bibliothèque des merveilles). 16mo, pp. III, 286. Paris, 1890.

Within six years there has been a great improvement in books, educational and popular, relating to archæology and the history of art. This is due to the fact that the authors have had excellent authorities to draw from. This work, however, has no merit whatever either of substance or of form, and abounds in extraordinary misconceptions and mistatements, often highly amusing, and in egregious typographic errors. Mediocre in merit as are most of the volumes in the *Bibliothèque des merveilles*, this is distinctly one of the worst.—S. REINACH, in *Rev. Critique*, 1890, No. 20.

ORIENTAL ARCHÆOLOGY.

G. MASPERO. *Aegyptische Kunstgeschichte.* Deutsche Ausgabe von GEORG STEINDORFF. Mit 316 Abbild. im Text. 8vo, pp. IX, 335. Leipzig, 1889; Engelmann.

Until ten years ago, scarcely anything had been done for the archæology of art in Egypt. Within the last decade, however, three independent presentations of the subject have appeared, one by Perrot and Chipiez, in the first volume of their *Histoire de l'art dans l'antiquité* (1882), one by Adolf Erman in his *Ägypten und ägyptisches Leben im Altertum*, and one by Maspero in his *Archéologie égyptienne* (Paris, 1887). No one of these can be regarded as anything more than a first attempt; the laborious detailed

investigations upon which alone a genuine history of art can be built up belong almost wholly to the future. Of the three works named, Maspero's is especially notable, because the author, in his capacity as director of the Egyptian excavations and of the museum at Bûlak, was able to accumulate a store of first-hand observations such as no other worker in the same field has had at his command. Moreover, the book is written in that brilliant style of which Maspero is an eminent master. It is much to be hoped that, at no distant day, Maspero may publish the detailed observations on which many of the novel views advanced in this book are based; especially in the department of industrial art is such publication needed.—A. ERMAN, in *Berl. philol. Wochenschrift*, 1890, No. 6.

The translator, who has done his work well, has enriched the original work at many points, and has appended two helpful indexes. His edition has independent value in that it contains cuts and descriptions of many important but hitherto unpublished monuments of Egyptian art in the Berlin Museum.—R. PIETSCHMANN, in *D. Literaturzeitung*, 1890, No. 11.

W. M. FLINDERS-PETRIE. *Hawara, Biahmi and Arsinoe*. 30 plates. Folio, pp. 36. London, 1889.

Mr. Petrie has continued his excavations in Egypt with great success. The present volume records the results of excavations carried on in the winter of 1887-8 in that part of the Fayûm, near the pyramid of Hawara, where Lipsius had fancied he recognized the actual ruins of the Labyrinth. Mr. Petrie has demonstrated the incorrectness of Lipsius' view, and has pointed out that these ruins belong to a late epoch and are of the houses and burial places of the inhabitants of Arsinoe (Strabo's "little village") which was founded upon the site of the Labyrinth. At present, nothing exists of this famous structure except a few fragments, some of which bear the names of Amenemhâit III and Sovkunofriu. The Labyrinth was originally a temple attached to the pyramid of Amenemhâit III, and perhaps subsequently enlarged. Mr. Petrie's suggested restoration, based in part on the remains and in part on the descriptions of ancient writers, gives a building of irregular shape resembling in some particulars the temple of Seti I at Abydos.

The cemetery of Hawara, at least the portion excavated by Mr. Petrie, is of Græco-Roman times, though in the masonry of the Ptolemaic tombs here found sarcophagi of an early date were immured (of the XX and XXI dynasties). The coffins were often of great beauty and elegance; the Greek ones furnished the rich collection of encaustic portraits which is now divided between the British Museum and the museum of Bûlak. Mr. Petrie's publication removes all doubts that have hitherto been associated with the portraits from Fayûm. Mr. Petrie believes that these por-

traits were originally taken from life and were subsequently used, when the coffin was made. It seems likely that the coffins were for a time kept in a place accessible to the relatives of the dead, before being heaped together where they are now found. Next in importance to the portraits are the 492 papyri discovered, upon which Mr. Sayce has written a chapter. The greater part of the papyri are official and private documents, accounts, lists, etc., and the oldest are not earlier than the Ptolemies, while the later reach to the age of the Antonines. The volume contains a translation of the hieroglyphic inscriptions (by Mr. Griffith), a study of the technique of the portraits (by Mr. Cecil Smith), and a catalogue of flowers and plants found in the graves (by Mr. Newberry). At Biahmi fewer monuments were discovered. The *débris* at this point, hitherto supposed to be the remains of the bases of two pyramids, is shown by Mr. Petrie to mark courts in which stood the two colossal seated statues mentioned by Herodotus in his description of the Labyrinth; a fragment of an inscription points to Amenemhät III as the author of one of these monuments. Finally, Mr. Petrie carried on excavations on the site of ancient Crocodilopolis, which lies to the north of Arsinoë. This temple was found to have been erected before the XII dynasty, but the hand of Amenemhät III had been busy also here, and the later Pharaohs had taken pains to keep the temple in repair down to the close of the Roman era.—G. MASPERO, in *Rev. Critique*, 1890, No. 1.

R. PIETSCHMANN. *Geschichte der Phöniciën*. 8vo, pp. 313. Illustrations and Maps. Berlin, 1889–90; Grote.

Inasmuch as a continuous series of monuments of Phœnician civilization are lacking, the materials for the history of this people must be gathered mainly from foreign sources—Egyptian, Assyrian, Hebrew, and Greek. The author of this work might greatly have improved his introductory chapters by the use of Egyptian and Assyrian authorities, with which it appears he grew more and more familiar as he proceeded, and might thereby have saved himself from not a few erroneous statements. Egypt and Syria at the time of the Ancient and Middle Empire had by no means the intimate intercourse with each other that has hitherto been taken for granted. Between 4000 and 3000 B. C., the paths of commerce were different from what they were later; *e. g.*, in these times, incense was imported into Egypt from Ethiopia; subsequently, from southern Syria. Syria and Egypt came into closer relations as time went on. It is, on the other hand, clear that the civilization of Babylon had penetrated into Assyria as early as about 2000 B. C., and into northern Syria not later than 1500 B. C.; here, in the land of the Hittites, it suffered characteristic modifications, under which form it was in turn borrowed from by Assyrians in the eighth century B. C.

In his attitude toward several questions the author exhibits needless skepticism; for example, in the matter of the Egyptian origin of the Phœnician alphabet, and in that of the dating of the founding of Carthage and the Tyrian colonies.—J. KRALL, in *D. Literaturzeitung*, 1891, No. 1.

CLASSICAL ARCHÆOLOGY.

AUS DER ANOMIA. *Archäologische Beiträge, Carl Robert zur Erinnerung an Berlin dargebracht.* 8vo, pp. 280, 3 plates and cuts in text. Berlin, 1890.

This is a collection of short essays on various subjects connected with classics and archæology, written by sixteen pupils of Professor Robert (*Anomia* is the title of a club), and dedicated to him on his leaving Berlin for Halle. Of special interest to archæologists are the following: (1) GRAEF publishes a head of Athena in Naples (*Mus. Naz.*, No. 6303) which he assigns to the middle of the fifth century B. C., and to Attic origin. From comparison with other types (*Ant. Denkm.*, I, 3) he thinks this a copy of the Parthenos, and deduces a formula for such copies. (2) KERN examines the Orphic cult of the dead, traces of which he finds in that of Attika. On vase-paintings, two classes of diminutive winged forms are represented: (i) the Eidolon of a particular individual always in the usual human form, nude, clothed, or in armor; (ii) those on Attic grave *lekylthoi*; here, there is no attempt at individualization; the figures are always winged and beside a tomb or death-bed or the entrance to Hades, and several of them are often gathered around one person; they are not *érotés funèbres* (Pottier), nor are they souls of the dead which come forth at the Anthes-teria (Hirsch), but are rather the souls of the bad vainly seeking rest and peace: this idea, which is expressed in Plato, is probably to be derived from Orphic teaching, not from the Pythagoreans. (3) SAUER maintains that the two reliefs published by Robert (*Ath. Mitth.*, VII, Taf. 1-2) do not represent the contest between Athene and Poseidon; they are excerpts from a greater scene represented on the east frieze of the Nike-temple, viz., the suit between Asia and Hellas (*cf. Mon. Ined.*, IX, pls. 50, 51). (4) NOACK studies the earlier representations of the Iliupersis on vases. He concludes that the Brygos and Euphronios cups are independent of each other, but are referable to a common origin, the work of some great unknown painter of the sixth century B. C. These two artists he dates before Polygnotos. (5) ROSSBACH contributes notes on the painter Pauson, the Gryphon, etc. Other noteworthy articles are contributed by H. VON GAERTRINGEN (on Thessaly in B. C. 700-400); KRETSCHMER, who derives Semele ("earth") and Dionysos (=Διόσκουρος) from Thracian-Phrygian words; TOEPFFER (Theseus and Peirithoos); and WERNICKE (certain Oriental elements in the Herakles legend).—C. SMITH, in *Class. Rev.*, 1891, pp. 79, 80.

IMHOOF-BLUMER. *Griechische Münzen*. Neue Beiträge u. Untersuchungen (Abhandlungen d. königl. bayerischen Akad. d. Wissensch. I. Kl., XVIII Bd., III Abt.). 378 illustrations on 14 photographic plates. Folio, pp. III, 273. Munich, 1890.

The work before us is a supplement to the author's *Monnaies grecques*, which appeared in 1883, and was the completest collection of its kind since Mionnet's day. It comprises over 900 coins—hitherto either unpublished or unsatisfactorily published—of about 250 cities, in the main from Asia Minor. Among the author's discoveries we cite that of a remarkable alliance, in Greece proper, early in the fourth century B. C., comprising Corinth, Dyrrhachion, Ambrakia, Korkyra, Leukas and Anaktorion, the coins of which bore the device of Pegasos and a Σ [νμμοχία]. In Keos it now appears that coins were struck only at Karthaia, Iulis, and Koressos (not at Poieessa). Archaic coins of Tenos, the type of which is the grape vine, and of Melos with an *oinochoe*, also come to light. Of the cities in Asia Minor, the following now appear for the first time in Greek numismatics: Himilion, in Paphlagonia; Termessos near Oinoanda, either in Lykia or Phrygia; Kerai, in Peisidia; Kibyra ἡ μικρά, in Pamphylia, and Holmoi in Kilikia. Of archæological interest are the representations of the infant Dionysos and Korybantes in Ionic Magnesia (hitherto explained as Zeus); of the *λκνοφόρος* in the Dionysos cult at Kyzikos and Teos; of Bakchos in the form of a bull in Skepsis; etc. An excellent feature of the work is the heed paid to the weight of coins, a highly important consideration, especially in ascertaining the extremely fluctuating values, in particular of copper coins (*ἀσσάρια*, etc.).—R. WEIL, in *D. Literaturzeitung*, 1891, No. 6.

RICHARD BOHN. *Alterthümer von Aegae*, unter Mitwirkung von Carl Schuchhardt herausgegeben. Folio, pp. 68; 75 illustrations. Berlin, 1889; G. Reimer.

With a view to the better understanding of the Pergamene finds, the regions about Pergamon were explored during the progress of the excavations. Aegae (Nemrud-kalassi), which lies a day's journey south of Pergamon, was, in July, 1886, visited by Bohn, Senz, and Schuchhardt, and the results of their observations are published in the work named above. The most important discovery was the striking resemblance of Aegae to Pergamon, architecturally; it appears that the buildings of Eumenes and Attalos at the capital served as models for the whole region about. Of an earlier date was, probably, the temple of Demeter and Kora, while the theatre belongs to Roman times. Aegae was one of the twelve cities of Asia Minor which were destroyed by an earthquake in the

year 17 A. D., and was rebuilt by Tiberius; traces of the structures erected at this time have been found in abundance. It furnishes the first clear example of a city regularly built upon terrace-like platforms.—P. H. . . L, in *Literarisches Centralblatt*, 1890, No. 29.

A. CARTAULT. *Vases Grecs en forme de personnages groupés*. 4to, pp. 16, 2 plates. Paris, 1889.

This pamphlet is a study of two vases now in the possession of MM. E. de Rothschild and van Branteghem. The author calls attention to their striking resemblances to the so-called "Asia Minor" terracottas, and infers therefrom not only that they are genuine but that they are Attic in origin. The fact, however, is that these vases are no less forgeries, of modern fabrication, than are the figurines in question.—S. REINACH, in *Rev. Critique*, 1890, No. 3.

F. v. DUHN und L. JACOBI. *Der griechische Tempel in Pompeji*. Nebst einem Anhang: Ueber Schornsteinanlagen und eine Badeeinrichtung im Frauenbad der Stabianer Thermen in Pompeji. . . . Fol., pp. 36; 9 lithographic and 3 photographic plates. Heidelberg, 1890; Winter.

In the spring of 1889, a company of university professors and gymnasial teachers from Baden visited Pompeii, and excavations under the direction of the authors of this book were carried on in their presence at the Greek temple. The attempt to ascertain the main features and to fix the date of the temple was only partially successful. The ground-plan indicates an ancient *cella*, with very deep *pronaos*, 6.40 m. by 14.70 m. (14.95?); the roof of the colonnade was probably made of wood, and the ceiling faced with coffers of terracotta, which was also the material of which the cornice was constructed. The date of the origin of the temple could not be determined; perhaps the temple is as old as the fifth century B. C. Many interesting details, however, relating to repairs and rebuilding at subsequent times were ascertained. The Appendix, in which Jacobi describes the heating arrangements in the smaller *calidarium* of the Stabian baths, is full of interesting information.—R. BOHN, in *D. Literaturzeitung*, 1891, No. 4.

PAUL GIRARD. *L'Éducation athénienne au V^e et au IV^e siècle avant J. C.* Ouvrage couronné par l'Académie des Inscriptions et Belles-Lettres. 8vo, pp. iv, 338; 30 cuts. Paris, 1889.

A charming book wherein the author, without furnishing much that is essentially new, but with a complete mastery of his subject, draws a vivid picture of education in Athens in the fifth and fourth centuries B. C., tracing the life of a young Athenian from the cradle to the Epheby.

Difficult problems are discussed only in the introductory chapters. Although the author has gone wrong in many details [thirteen of which are specified with interesting corrections]—especially in the dating and explanation of vase-pictures, and in the inferences drawn from these considerations—the general impression produced by his book is a correct one.—C. ROBERT, in *D. Literaturzeitung*, 1890, No. 52.

A. BOUTKOWSKI-GLINKA. *Petit Mionnet de poche ou repertoire pratique à l'usage des numismatistes et collectionneurs des monnaies grecques, etc.* 1^{re} partie. 12mo, pp. 192. Berlin, 1889.

The author gives us a list, arranged in geographical order, of the more important Greek coins of antiquity, with exact information as to their weight, devices, and ancient values, and their modern equivalents. There are no illustrations. The recent numismatic and historical literature relating to the subject has been utilized; and, although the author has constantly had the aid of Imhoof-Blumer, he has made an independent investigation of several points. Not a distinct contribution to science, the little work will be found useful as a convenient book of reference for travellers in Southern Europe and the Orient.—S., in *Lit. Centralblatt*, 1890, No. 18.

WILHELM GURLITT. *Ueber Pausanias.* 8vo, pp. XII, 494. Graz, 1890; Leuschner und Lubensky. 10 marks.

For several years there has been a lively discussion as to the value of the only detailed description of ancient Greece which is preserved to us, the work of Pausanias the periegete. Conservatives have lauded his merits and sought to cover up or palliate his shortcomings; radicals have treated him with acrimonious and almost personal contempt. Between these two extreme parties Gurlitt offers himself as arbiter. He undertakes to sift the evidence afforded by Pausanias himself, as well as all relevant external evidence, with the object of determining the writer's degree of independence and credibility. This undertaking is carried out with great thoroughness, and the results are presented in an attractive form.

It is in his descriptions of the Peiraieus, of Athens, Olympia and Delphi that Pausanias's statements can be best tested, because in these places, thanks especially to recent excavations, our other sources of information are most ample and accurate. Now it is becoming constantly clearer that his topographical matter—we are not at present concerned with his historical and other digressions—is of very unequal value. Side by side with statements so accurate as to lead to the discovery of places or objects previously unknown stand others which can be proved, on the testimony of various witnesses or by observation on the spot, to be highly inexact or

downright false. These two classes of statements are distinguished by no internal mark, and it is only now and then that we are enabled, by external evidence, to recognize their respective values. Thus we are led to the conviction that Pausanias's work is not based chiefly upon first-hand observation, but rather upon literary sources. The only possible points of controversy are, what these sources were and how he used them, whether he gathered much supplementary material by his own travels, and, if so, how he turned this to account.

To enter fully into these controversies would lead beyond the limits of a brief notice, and we must therefore confine ourselves to two or three general points of view. Gurlitt regards the work of Pausanias as essentially a guide-book, intended to emancipate the traveller from troublesome *ciceroni*. This is claiming for the book qualities which it does not possess, and, at the same time, is unjust to the author's praiseworthy effort to present, for each locality, a picture constructed on one uniform scheme. Pausanias is no substitute for a well-informed guide; what he offers us is a quantity of more or less valuable learning, distributed on a framework of topographical notes. His book has about as much practical usability as an ordinary hand-book of geography. Again, Gurlitt goes too far in the effort to excuse or explain away the historical and geographical errors which have been pointed out in Pausanias. In short, he is too much of an apologist. Nevertheless, we cordially recognize that he has made by all odds the most valuable contribution to his subject which has yet appeared.—*LOLLING*, in *Göttingische gelehrte Anzeigen*, 1890, No. 15, pp. 627–31.

WOLFGANG HELBIG. *Führer durch die öffentlichen Sammlungen klassischer Alterthümer in Rom*. 2 vols.; 12mo, pp. xii, 548; 433. Leipzig, 1891; Karl Baedeker.

The remains of classical sculpture in Italy are being exhaustively catalogued and described by German scholars. What Dütschke's *Antike Bildwerke in Oberitalien* has done for Northern Italy and Matz and von Duhn's *Antike Bildwerke in Rom* for the private collections of Rome, Helbig's *Führer* has accomplished for the public galleries of Rome. It covers a more important field than either of the others, and is at once more practical and more thorough. We are led through the various museums of the Vatican, the Capitol, the Lateran, the Conservatori Palace, the Villas Albani and Borghese, the Palazzo Spada, the Boncompagni and delle Terme and the Collegio Romano. The Etruscan museum of the Vatican and the two museums in the Collegio Romano are described by Emil Reisch. What the student wishes to find in a catalogue of these monuments is (1) their provenience and state of preservation, (2) their probable date and significance, and (3) references to the best illustrations and special treatises.

This information Helbig has furnished us in very convenient form, by the use of different types. The references to figured illustrations dispense with the necessity of minute description, and permit the text to deal chiefly with interpretation. Helbig's interpretations are formed with independence and excellent judgment. Thus the Centocelle statue, which usually passes for an Eros of the type established by Praxiteles, is determined, by comparison with replicas, to be a Thanatos. The terracotta plaque which Waldstein considered an original sketch by Pheidias is here catalogued as modern. The Laokoön is freed from the supposed dependence on the Pergamon frieze, but the relation which the Torso and the Apollo of the Belvidere may have borne to the Pergamene sculptures is left unnoticed. It is probably an oversight which permitted the restorations of the Laokoön to be noticed in the large type, elsewhere expressly reserved for interpretation. As this monument is catalogued as the original work of the three Rhodian artists, it is important that the kind of marble used should not have been left unnoticed. In describing the silver *paterae* from the Regulini-Galassi tomb and the celebrated *patera* from Praeneste, Reisch follows the view advanced in *the American Journal of Archaeology*, III, p. 322 ff., that they are probably of Cypriote origin, and that the Praeneste *patera* presents some Assyrian or Phœnico-Cypriote myth, though he will not go so far as to connect them with any definite Cypriote legend. The bibliographic references appended to the interpretation of each monument, though few in number, are selected from the best authorities. In order that such a work as this should prove even more useful to scholars, and especially to those who are unable to visit Rome to examine the originals, it is most desirable that, along with verbal description and bibliographic references, the contents of museums should be fully exhibited by some photographic process. Where is the museum that will begin such a systematic exhibition of its treasures?—A. MARQUAND.

R. KEKULÉ. *Ueber die Bronzestatue des sogenannten Idolino*. 49.

Programm zum Winckelmannsfeste der Archäologischen Gesellschaft zur Berlin. Mit 4 Tafeln. Folio, pp. 21. Berlin, 1889.

The first three plates of this pamphlet—in which is published, by a competent hand, “the most beautiful of ancient bronze statues”—supply a lack long felt, viz., a satisfactory representation of the Idolino. After a sketch of the history of the statue since its discovery in 1530, and of the bibliography, the author gives a delicate and appreciative analysis of the stilistic characteristics of the statue. He appears to be wrong, however, in describing the situation as one suggesting “the moments of movement and activity:” the position of the right hand shows that the boy still holds the oil in it, and the body would have been differently balanced

had that been the intention. The author dates the statue before the Parthenon sculptures, making it the oldest of the series—(1) Idolino, (2) youth pouring the oil (Munich), (3) the standing Diskobolos—and actually sees it in an original work of Myron. The Massimi Diskobolos, however, exhibits the characteristic Myronian “action,” which we miss in the Idolino, and besides shows an earlier treatment of the hair, though there is a striking resemblance in the two heads. The contrast drawn between the heads of Polykleitos and that of the Idolino is suggestive, but this does not necessarily prove that the Idolino and its congeners do not belong to a late Peloponnesian school that carried on Polykleitean traditions. Kekulé has however demonstrated the Myronian connections of the statue, and the reviewer [Michaelis] admits that the work must be placed in the fifth century B. C.; he would ascribe it not to Myron but perhaps to his son Lykios. The reviewer fails to see (with Brunn and Kekulé) the Myronian character of the standing Diskobolos, the Farnese Diadumenos and the Amazon (by Klügmann ascribed to Pheidias): the motive, the forms and proportion of the bodies, and above all the heads, tell against this view.—AD. M., in *Lit. Centralblatt*, 1890, No. 48.

V. LALOUX et P. MONCEAUX. *Restauration d'Olympie*. L'histoire, les monuments, le culte et les fêtes. Folio, pp. 224, 10 plates and many cuts. Paris, 1889.

In spite of the excellences of the three early publications relating to Olympia—the *Ausgrabungen zu Olympia* of the German Institute, with its inadequate text, Bötticher's handy compilation, and Flasch's noteworthy article in Baumeister's *Denkmäler*—it has been reserved for Frenchmen to furnish the first satisfactory monograph upon the subject, intended for artists and the general public. The text is from the hand of M. Monceaux, and it explains the beautiful plates, which are made in part from photographs and in part from the restorations of M. Laloux. The latter scholar, formerly *pensionnaire* of the French Academy at Rome, and author of a brief history of Greek architecture [see JOURNAL, VI, 1890, p. 133], has furnished drawings and designs that merit the highest praise; among these we select for special mention the magnificent photogravure of the *temenos* as restored. There are, however, two points in which M. Laloux's work calls for severe criticism. In his use of decorative motives suggested by Greek ceramic art, he has been guilty of grave anachronisms and improprieties: thus the outer wall of the *cella* of the temple of Zeus he has decorated with archaic designs, failing also to observe the law which prohibited the use, upon walls, of the ornament developed on and peculiar to vases. The second point for criticism is the restoration proposed for the statue of Olympian Zeus; it is vastly inferior to the other drawings; it fails to sug-

gest the technique of chryselephantine work ; the statue lacks the stamp of severity, is vague and ill-defined. The ornamental figures represented as painted or carved on the throne of the god combine motives taken from vases of 600 B. C. with those suggested by the art of Hellenistic Greece. As compared with the restoration of Quatremère (1813), that of Laloux marks a retrogression. The text of M. Monceaux is attractive and spirited and not surcharged with erudition. It is, however, to be regretted that he has not yet made up his mind on many questions still agitated among archæologists, and that he affects an indifference to important problems the solution of which is within reach. In the arrangement of his material he has been more satisfactory : first we have a history of Olympia to the close of German excavations ; then a sketch of the topography of the region with especial reference to the works of art ; and finally an excellent study of the cults of Olympia and of the Olympian festival. Since not a line of Phœnician has been found at Olympia, the author's statements as to the important part taken by this people in the early history of the region are hazardous, to say the least. There are not a few other assertions equally open to criticism. In spite, however, of these defects, this work will take an honorable place in the library of the artist.—S. REINACH, in *Rev. Critique*, 1890, No. 6.

A. LEBÈGUE. *Une école inédite de sculpture gallo-romaine.* 8vo, pp. 28. Toulouse, 1889.

In this memoir the author discusses the discoveries at Martres-Tolosanes which have so enriched the museum at Toulouse. In particular he examines the sculptures ; among these a basrelief representing Tetricus is said by him to be the most interesting monument of the Gallo-Roman empire. These works of art are original works of a local school of sculpture hitherto wholly ignored by archæologists, which, active about the third century A. D., deserves a place in the annals of ancient art.—T. DE L., in *Rev. Critique*, 1890, No. 2.

PAUL LEJAY. *Inscriptions antiques de la Côte-d'Or.* 8vo, pp. 281. Paris, 1889.

Here are published 306 ancient inscriptions (including 11 of doubtful genuineness) gathered from various places in the Côte-d'Or in France : they are arranged in alphabetical order according to their provenience, and, with the exception of two, probably spurious, in Greek, and three, genuine, in Celtic, are wholly in Latin. They belong to the Celtic tribes of the Lingones, Aedui, and Sequani, and, for the most part, are sepulchral and dedicatory : from the latter class we learn the names of several local Gallic divinities, the leaders of which are Mars Sicolvis and either

the Gallic Litavis, or the Roman Bellona. The editor's notes are full and exhaustive, though not without occasional blunders, and there are good indexes. At least until the appearance of the volume of Gallic inscriptions in the *CIL*, this book will be indispensable to the student of the subject.—A. H., in *Lit. Centralblatt*, 1890, No. 27.

MONUMENTI ANTICHI. Pubblicati per cura della Reale Accademia dei Lincei. Vol. I. Puntata I. Con 10 tav. e 83 incisioni nel testo. Folio, coll. 166. Milano, 1890; Hoepli.

This new publication—edited by a committee of the *Accademia dei Lincei*—is designed to serve as a supplement to the *Notizie degli Scavi* published monthly by the same Academy. Like the latter, it treats of all important discoveries in the field of classical archæology, epigraphy, and numismatics. Whereas the *Notizie* aims to give timely intelligence, in brief reports, of new discoveries as they are made, the *Monumenti* proposes to present to specialists, in carefully prepared essays, the results of investigations that may have extended over a long period of time, as well as to publish newly discovered monuments and to republish others hitherto inadequately published. This first *puntata* contains (1) a report upon the excavations of the temple of Pythian Apollon at Gortyn in Krete, by HALBHERR; (2) fragments of archaic inscriptions from the same place by COMPARETTI—which appear to fix the date of the introduction of coinage into Krete; (3) a report, by L. PIGORINI, upon excavations conducted by the writer at Fontanellato (Castellazzo) in Parma; (4) on the weight of the Etruscan pound, by G. F. GAMURRINI, based on a find of ancient weights at Chiusi (Clusium). The inscriptions discussed by Halbherr throw light on the Doric of Gortyn at about 300 B. C.: *e. g.*, F; acc. plu. in *ovs*, *avs*, *êvs* and *ês*; *κόρμος*=*κόσμος*; *πορτί*=*πρός*.—A. H., in *Lit. Centralblatt*, 1890, No. 23.

S. REINACH. *Chroniques d'Orient*. Documents sur les fouilles et découvertes dans l'orient hellénique de 1883 à 1890. Pp. xv, 787, one plate and several cuts. Paris, 1891.

This bulky volume consists mainly of reprints of reports, which appeared from the author's hand in the *Revue Archéologique*, upon excavations and discoveries in Greek lands between 1883 and 1890, together with several articles upon like topics written by him for various other periodicals. The value of the original reports is greatly enhanced, not only by the index of fifty pages—with hardly less than ten thousand references—but also by the addition of many foot-notes, in which the information given in the text is brought to date, and attention is called to recent literature. These *Chroniques*, at first little more than meagre reports of recent finds, gradually became a complete repertory of informa-

tion not alone upon these matters, but also upon the substance of the more important current articles and minor publications upon Greek archæological discoveries, upon bibliography in general, and upon the acquisitions of museums. The articles on the so-called "Asiatic Terracottas"—as a rule, forgeries made in Athens, probably by Italian artists—are interesting reading. M. Reinach's warnings are needed. For, although archæologists are in the main of one mind in the matter, they are not outspoken, and, as a result of this apathy, the forgers and the dealers in these figurines continue their corrupt practices upon a public still reluctant to be undeceived. This handsome volume, with its convenient index to an important part of the unindexed *Revue Archéologique*, will be a boon to many a library.—*The Nation*, Sept. 24, 1891, p. 239.

THEODOR SCHREIBER. *Die hellenistischen Reliefbilder*. Erste Lieferung. Leipzig, 1889; Engelmann. 20 marks.

This is the first instalment of one of those great serial publications, undertaken by the German Archæological Institute and other kindred bodies, and intended to present in systematic form the entire existing stock of ancient sculptures. In this instance it is to the Saxon *Gesellschaft der Wissenschaften*, assisted by the ministry of worship and education, that our thanks are due. There are few archæological publications which have so high a claim as this to be widely known. Not only for the philologist is it important to become acquainted with these idyllic and heroic scenes of the Hellenistic period, and thus with one important source of inspiration to the Augustan poets; but all who possess any appreciation of classic art must needs be charmed by the affluence in invention, the elegance of form, and the refinement of feeling which characterize these products of a luxurious civilization. The helio-engravings, executed by Dujardin in Paris, are of the highest merit.—A. BRÜCKNER, in *Berl. philol. Week.*, 1890, No. 13.

HEINRICH STRACK. *Baudenkmäler des alten Rom*. Nach photographischen Originalaufnahmen. Folio, pp. 20, with 20 plates. Berlin, 1890; Ernst Wasmuth. 20 marks.

Of the twenty plates contained in this work, Nos. 1 and 2 show the Forum from the east and the west, 3–6 the Pantheon, 7 the Forum of Augustus, 8 the temple of Castor, 9–11 the Colosseum, 12–13 the arch of Titus, 14 the Forum Boarium with its temples, 15 the Forum of Trajan, 16 the temple of Faustina, 17 the Poseidonium of Agrippa, 18 the column of Marcus Aurelius, 19 the arch of Gallienus, 20 the arch of Constantine. The photographs were admirably taken and have been admirably reproduced. The selection of monuments to be represented was made with skill

and doubtless after mature consideration. Nevertheless, two monuments of the highest importance have been omitted, the theatre of Marcellus and the Porta Maggiore; both of these, but especially the unfinished columns of the latter, have exercised an immense influence over modern architecture. Could the work be somewhat enlarged, these two buildings should be the first to be included. Less important, but still deserving a place, are the Basilica of Constantine and a section of the Neronian aqueduct (if possible, with the Arch of Dolabella). The twenty pages of text accompanying the illustrations are excellent in form and substance.—O. RICHTER, in *Berl. philol. Woch.*, 1890, No. 50.

F. STUDNICZKA. *Kyrene, eine altgriechische Göttin*. Archäologische u. mythologische Untersuchungen. 8vo, pp. xi, 224; 38 cuts. Leipzig, 1890; Brockhaus.

This admirable study contains much more than its title suggests, viz., a discussion of the "Kyrenaic" vases, of a relief from Olympia representing Kyrene in conflict with a lion (from the treasury of the Kyreneans), of the legends of the founding of Thera, of Kyrene, etc. Kyrene, the goddess, is proved to be the counterpart of Artemis. In one of the appendices, F. Dümmler endeavors to prove that Hektor was originally a Theban hero, hardly with success. By the skilful use of archæological materials, the author has produced a book which will be of great service to all workers in the field of Greek religion and culture. It is to be hoped that similar books may soon be written for Naukratis, Rhodes, Kypros, and Krete.—CR., in *Lit. Centralblatt*, 1890, No. 33.

K. WERNICKE. *Die griechische Vasen mit Lieblingsnamen*. Eine archäologische Studie. 8vo, pp. 143. Berlin, 1890; G. Reimer.

This book is a timely and welcome supplement to W. Klein's *Griechische Vasen mit Meistersignaturen*, especially since the chronology of Greek vases has received greater definiteness from the discoveries upon the Athenian acropolis within the last half dozen years. The author groups his material under six heads: I, where *καλός* refers to the picture; II, names of women; III, names of males, only on b. f. vases; IV, of males, on both b. f. and r. f. vases; V, of males, only on r. f. vases; VI, names on other vases. In the seventh chapter the historical significance of these inscribed vases is discussed: they are shown to be Attic in origin, and to belong between B. C. 540 and 440. Several indications make it clear that the inscriptions do not necessarily imply personal intimacy between the vase-painter and the persons mentioned with *καλός*; for among these names occur not only those of many eminent vase-painters but also those of highly aristocratic personages. Some of the latter the author seeks to identify

with well-known historical characters (*cf. Jahrb.*, II, p. 159 *seq.*). It is to be regretted that the important question of the chronology of the inscribed vases, as determined by their technique and decoration, is inadequately considered, that the treatment in general is sketchy, and that the bibliographic notes are meagre and unsatisfactory.—F. STUDNICZKA, in *D. Literaturzeitung*, 1890, No. 35.

CHRISTIAN ARCHÆOLOGY.

J. v. ANTONIEWICZ. *Ikongraphisches zu Chrestien de Troyes*. 8vo, pp. 28. Erlangen and Leipzig, 1890.

This essay is valuable in containing not only an admirable discussion of a French ivory-casket of the fourteenth century rediscovered at Cracow in 1881, but also some excellent remarks on the importance of the comparative study of the monuments of art and of literature, especially poetry, of the Middle Ages, a subject that has been sadly neglected. This casket furnishes a charming example of the union of the poetical legends with the illustrator's art of the fourteenth century; here are represented the storming of the Minne castle, the story of Alexander, Aristotle and Phyllis, of Pyramus and Thisbe, of Tristan and Isold, together with suggestions of mediæval animal fables, tales of giants, gnomes, *etc.* Certain peculiar features in the romance of Chrestien de Troyes (Launcelot and Gawain) are figured in this work of art, which leads to the suggestion that the poet's conceptions were to a certain extent moulded by the pictorial or carved representations.—FR. SCHNEIDER, in *D. Literaturzeitung*, 1891, No. 1.

F. GREGOROVIVS. *Geschichte der Stadt Athen im Mittelalter*. 2 Bände. Stuttgart, 1889; Cotta. 20 marks.

Alike for form and substance, this history deserves to take rank, as a classic, beside the works of Gibbon and Finlay. During the period from the sixth to the twelfth century A. D., Athens, according to the ordinary view, had no history, while for the period from the twelfth to the fifteenth century the dynastic and political facts are highly complicated and the materials extraordinarily scattered. Nevertheless, by virtue of a wonderful constructive power, Gregorovius has succeeded in making a work at once instructive and fascinating. The reader is enchained by the vigorous style, the ingenuity in hypothesis, the masterly arrangement, above all by the ample background of political and social history, a background on which, to be sure, the picture of the city of Athens sometimes appears like a microscopic figure on a gigantic canvas. Gregorovius has given us more than a history of Athens; it is a history of the Greek provinces of the Byzantine Empire.—K. KRUMBACHER, in *Berl. philol. Woch.*, 1890, No. 2.

JULIUS SCHLOSSER. *Die abendländliche Klosteranlage des frühen Mittelalters*. 8vo, pp. II, 83 and III. Vienna, 1889; Gerolds Sohn.

This, the first work of its author, is marked by industry, accuracy and method, and is a valuable contribution to knowledge in a field in which, as yet, little has been done. Schlosser's researches, which give evidence of a thorough mastery of all the materials, terminate with the beginning of the eleventh century. He rightly recognizes the *claustral* as the fundamental principle in the scheme of monastic structures in western Europe. The origin of this principle is obscure, as is that of the basilica-tower. According to the author's hypothesis, suggestions of it are apparent in the monasteries proved by Wiékhoff to be as old as the age of Augustine. By the eighth century, this scheme is well established in the Benedictine monasteries. Especially suggestive are the remarks upon the important document relating to the buildings of Farfa.—DEHIO, in *D. Literaturzeitung*, 1890, No. 17.

RENAISSANCE.

GEORG GALLAND. *Geschichte der holländischen Baukunst und Bildnerei im Zeitalter der Renaissance, der nationalen Blüte und des Klassicismus*. Mit 181 Textabbild. 8vo, pp. XII, 635. Frankfurt a. M., 1890; Keller.

The art of Holland possesses a strong attraction for those interested in Germanic civilization, and for more than a century the Dutch painters have been the object of diligent study in Germany. Dutch architecture and sculpture have, however, been almost wholly neglected. The work of Galland, which discusses both these subjects, deserves recognition as an attempt to supply a deficiency. The author's enthusiasm, and the fact that he gives signs of a personal familiarity with the monuments described, will offset defects of plan and of form, and lend the book permanent value.—BODE, in *D. Literaturzeitung*, 1890, No. 28.

ARCHÆOLOGICAL NEWS.

SUMMARY OF RECENT DISCOVERIES AND INVESTIGATIONS.

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A F R I C A.

TUNISIA.

LIMITS OF ROMAN OCCUPATION.—M. Blanc, who was charged by the *Soc. des Antiquaires* with a mission in Tunisia, occupied himself mainly in determining the southern boundaries of the Roman occupation in Tunisia, Tripoli and Southern Algeria. He presented a report on the subject to the Society on Jan. 29, 1890.

EXCAVATIONS MADE DURING 1890.—On p. 520 of vol. VI, it was stated that the archæological campaign of 1890 was the most fruitful ever undertaken in Africa. While awaiting the full report which will be presented by M. de la Blanchère to the *Académie des Inscriptions*, the following is taken from the summary already communicated by him to the Academy and published in the *Ami des Monuments*.

BULLA REGIA.—The excavations were, as before, under the direction of Dr. Carton and were the continuation of those of the previous year. Still, they were not confined to the Roman necropolis which continued to furnish its supply of lamps, pottery, and funereal objects. The Punic necropolis was attempted, but the greater part of its tombs had been pillaged, and the block of rock above it, on which the head of a divinity is rudely carved, was sent to the Bardo. The Berber necropolis, in dolmens, was also excavated and furnished a number of singular rude pieces of pottery. Several soundings were made in the ruins of the city itself, and its level was found at the great depth of some ten metres, under *débris* and earth. The contents of the Roman necropolis are of all ages and extremely interesting: all modes of burial, from cremation to inhumation in leaden coffins, have been met with.

GAFSA.—The beautiful mosaic found here representing the circus at the moment of a race, with rows of seats filled with spectators, has been removed from its site and transported to the Bardo museum.

MAGHRANE.—**BIRCHANA.**—In this property, at Maghrane, near Zaghouan, the discovery of a mosaic had been made, some time ago; but it was only partially uncovered. It has now been given to the museum of the Bardo by M. Humbert. It is composed of a hexagon geometrically divided into a number of compartments which form zones around a head of Saturn. The first zone contains the divinities of the other six planets, forming, with the centre, a representation of the week; around, in a second zone, run six animals; a last zone contains the signs of the zodiac. Such paintings are not rare, but this one is remarkable for the perfect execution of the mosaic-work, which is superior to most of the African work. Outside of the zodiac are two semicircular medallions, finer both in drawing and workmanship, which represent, one, the head of Oceanus, the other, a peacock.

MAHEDIA.—M. Hannezo renewed the exploration of the Neo-Punic necropolis near this city. He examined over a thousand tombs, of which not one in a hundred were intact. However, a considerable number of objects were found, of which a large portion were given by him to the museum. His most interesting discovery is probably an inscription in very early Cufic characters cut on the wall of the well that leads to one of these sepulchral vaults, above its entrance. It not only shows that these tombs were made use of again at the time of the Mussulman invasion, but it appears to be the earliest example of Arabic epigraphy existing in Barbary.

SOUSSA=HADRUMETUM.—M. Doublet, a former member of the School at Athens, was charged with continuing the exploration of the Roman necropolis of Hadrumetum. He unearthed a considerable number of hypogea, each usually containing several tombs, and enclosed in nine separate walls. The whole appears to belong to the second and especially to the third century of our era. The most important of the objects found is a series of terracotta statuettes representing single figures and groups, Venus, Bes, busts, bigas and quadrigas, horsemen, a love-scene, a camel. There are between 60 and 65 of these statuettes, 40 of which are quite intact. Some bear vivid traces of the colors with which they were painted, some are charming, all are interesting. Beside these, there are lamps; pottery; stamped bricks; a *tabella devotionis* in Greek, the largest known (47 lines, 255 by 245 mill.); a small lead triptych with Venus and Cupid, to be hung around the neck; and a very delicate mosaic representing a vessel arriving at port and unloading genii. In the course of removing this mosaic, MM. Doublet and Pradère discovered another which is a piece

of capital importance. It represents Oceanus lying on a banqueting couch in the midst of his kingdom. His head is covered with lobster-feet, and his beard is of green seaweed. He is drunk and is snapping his fingers ; around him is the sea full of finely drawn fish. This work is being removed.

TABARKA.—Excavations are still in full activity on this site, the work being concentrated on the Christian cemetery or rather cemeteries of the ancient Thabraca. Besides a number of objects and human remains, there have been unearthed some hundred Christian and pagan inscriptions, and more than sixty mosaic sepulchral slabs. These slabs, always interesting and often of great beauty, now form a unique series, as curious from the point of view of mosaic-art as precious for the study of the fifth and sixth centuries. For these sepulchral slabs not only include epitaphs but are decorated with male and female figures, some of which appear to belong to dignitaries of the community, with male and female *oranti*, with varied decoration and attributes, and also animals. Before this, there had been found at Tabarka seven mosaics, which though in great part destroyed had given an idea of this series. Near Tabarka, at the Clouet-Godmet farm, was excavated a construction with three apses from which was taken a mosaic not less than fifteen metres square. Unfortunately, the central composition was almost completely ruined, and of it only some fine fragments of animals were left. The mosaic pavement of the three apses represents the various buildings of a large rural establishment, each with its characteristic form, its occupants, animals, pet birds or barnyard fowl, with its surroundings, vineyards, orchards, groves, olive plantations, rocks, ponds. In one of the pictures is a seated spinner of most remarkable workmanship.

TUNIS.—THE MUSEUM.—M. de la Blanchère adds that the Museum at Tunis received further additions from the investigations at the Belvédère, at Maktar, at Souk-el-Arba, *etc.* He calls attention to the riches that are accumulating, and forming here a collection of first-rate importance, especially in its unrivalled series of Roman mosaics. But all the funds are expended in digging and transportation ; nothing is left for the expenses of mounting and exhibiting, and the arrangement of the collections will be delayed until financial assistance is obtained.—*Ami des Mon.*, 1891, pp. 34–38.

CASTELLUM MUTECI.—Father Delattre has established the site of Castellum Muteçi, in Mauretania Caesarensis, at a place called *Aïn Aneb* seven kilom. from Tassemsil in the region of Teniet-el-Had. It was a bishopric in 482. At that time Quintasius was bishop, and he was exiled by Huneric, king of the Vandals in 484. It was also the seat of a *præpositus limitis*, who was under the orders of the *dux et præses prov. Mauritaniae Caesariensis*. An inscription over the very door of the *Castellum* in two lines gives its name . . . CASTELLVM | MVTECI POSITVM | EST ANP | CCCCXXX ET GIII. Hence the *Castellum* was founded or rebuilt in 479 or 480.—*Bull. Soc. Antiquaires*, 1890, p. 64.

ALGERIA.

ORLEANSVILLE.—A ROMAN MOSAIC.—The *Bulletin* of the *Soc. des Antiquaires* (1890, p. 61–2) publishes a mosaic which was found in June, 1883, in the court in front of the main entrance of the military hospital at Orleansville, among remains of ancient constructions similar to those of the Roman baths at Gafsa in Tunisia. Orleansville probably occupies the site of the Roman *Castellum Tingitanum*. The mosaic measures 1.67 by 1.83 met. Its coloring is extremely bright and it is perfect except where part of the chest of two of the figures has fallen away. Its style dates from the first half of the third century. There are two scenes represented together, both hunting scenes. Below, a panther leaps out of a wood at a horseman: above, two men on foot accompanied by a dog are withstanding a wild boar at whom one of the men is aiming a boar-spear. Above, are two lines of inscription: SILIQA FREQVENS FOVEAS MEA MEMBRA LAVACRO.

ASIA.

JAVA.

SEPULCHRAL MONUMENTS.—Last year, Dr. Hamy called attention to the excavations which were being carried on in the interior of Java by several Dutch archæologists; and connected mainly with Buddhistic monuments of the Plambanan plain. Thanks to a communication of M. Ysermann, Dr. Hamy was able to inform the *Académie des Inscriptions*, on March 25, of some more recent discoveries made in the Civaïtic ruins of this plain under the direction of Dr. Groënnemann. These excavations included the clearing of a number of inner chambers whose sepulchral character M. Ysermann ascertained by finding under the base of the statues of the gods several cinerary pits. The outer galleries and the base of the monuments were disengaged from *débris* engaged in a thick alluvial deposit. Four rows of magnificent basreliefs were uncovered, photographs of which were exhibited to the Academy. One of these rows of reliefs forms a kind of illustration to a part of the famous Indian poem, the *Ramayana*.—*Ami des Mon.* 1891, p. 110.

PHŒNICIA.

SIDON.—CHRONOLOGY OF ITS KINGS.—M. Ernest Babelon has communicated to the *Acad. des Inscr.* (Dec. 5, 12, 1890) some discoveries which he has made on the coins of the kings of Sidon struck in the fourth century B. C. under the dominion of the Persian Achæmenidæ. These coins have on one side the Sidonian galley, on the other the head of the king of kings in a three-horse chariot followed by a tributary king on foot. The legend

is composed usually of two Phœnician letters and a cypher. M. Babelon divides these coins into groups each belonging to a different person, either a king of Sidon or a Persian Satrap of Egypt, or the satrap of Kilikia, Mazaïos. The Phœnician letters are the initials of their names and the cyphers are the dates expressed in the years of their reigns. M. Babelon proposes this chronology.

1. An anonymous king, died in 374;
2. Strato I, 374-362;
3. Tennes, 362-350;
4. Interregnum, 350-349;
5. Evagoras II (dispossessed king of Salamis), 349-346;
6. Strato II, 346-332.

Sidon was captured by Alexander in 332.

ASIA MINOR.

SINDJIRLI.—SUMMARY OF THE GERMAN DISCOVERIES.—Chr. Belger publishes in the *Berl. phil. Woch.*, 1891, Nos. 26, 29-30, an account of the results of the German expedition to Sindjirli undertaken in 1889, of which a summary is here given. Further references may be found in the *JOURNAL*, vol. III, p. 62 (Ward's and Frothingham's article on the sculptures) and vol. IV, pp. 483-5. Sindjirli lies near the boundary between Asia Minor and Syria. What race inhabited it is still doubtful, the veil that obscures the "Hittites" not being yet lifted. An important indication is the finding of Aramaic inscriptions. A fortified city existed here in about 900 B. C. surrounded by a double wall and crowned by a strong acropolis within which the greater part of the sculptures were found. The history of the investigation of its ruins is as follows. In 1883, under Hamdy Bey's directions, some of the sculptures were uncovered in the ruins of a palace. These were seen and photographed by Mr. J. S. Sterrett and Mr. Haynes and published in the *Journal of Archaeology* by Dr. Ward. They were also visited by Dr. Puchstein, who published them again in his *Reisen in Kleinasien und Nordsyrien* (Berlin, 1890), without acknowledging our previous publication. When the Oriental Committee was organized in Berlin for the purpose of excavating in the East, it was decided to make attempts both in Mesopotamia and Syria. Mess. Humann, von Luschan, Winter, and Koldewey conducted the excavations at Sindjirli, which was the first site selected. The work lasted during three campaigns and was reported (June 10, 1891), in the *Museum für Völkerkunde* in Berlin.

City.—The centre of the city is formed by a hill running SW and NE. Upon it the various kings built their palaces, each adding to his predecessor's work. The gates of the walls that enclose this hill are on the exposed south side where it slopes toward the plain. The road winds

up through the larger gateway. Inside, facing the entrance is a wall strengthened by towers, stretching across the hill in which a second gateway is cut. Both gateways were decorated in their lower part with sculptures carved on upright blocks of stone about six feet high. One half of these were sent to Constantinople, the other half to Berlin. From the interior of the second gateway came two lions. It is probable that a second wall with its gateway extended across the top of the hill, but this section has not yet been fully excavated. On this strongly protected plateau of the acropolis stood the palaces: the oldest stands on the highest point, to the nw.; the latest belongs to about the year 730 B. c.

Taking the hill as a centre, the inner city-walls are built at a distance from it of between 200 and 250 metres. There are two walls within a small distance of each other, the diameter of the outer circuit being 700 metres. Both walls are strengthened by about one hundred pier-like projections, which are identified as being towers, by a comparison with the plans and siege scenes, in Layard's *Nineveh*. In his *Monuments of Nineveh*, 1st series, pl. 30, the view of a similar circular city is given; to which also pl. 77 may be added. In his second series are views of numerous cities, built on an oval plan or as parallelograms with rounded corners. Here, also, a double wall is almost always seen, strengthened by towers and crowned by battlements, the outer being only about half as high as the inner wall; while toward the centre rise loftier towers which may belong to an acropolis like that at Sindjirli. The upper part of the walls, with their tooth-like battlements, appear to have been of wood: their lightness of construction and foundation limited the number of their defenders, usually archers. By these Assyrian reliefs the plan and arrangement of Sindjirli are fully explained. We even find grounds here for agreeing with Dörpfeld in believing the pier-like projections at Hissarlik to be also towers instead of mere buttresses.

The lower city, enclosed between the walls, is entered by three gates, each flanked by two strong projecting towers, so that six towers guard the gates and 94 the walls. The main gate is directly south of the acropolis, the others at about equal distance on either side. Between the s. and the w. gate are 25 towers; between the s. and the n. gate, 32; between the w. and the n. gate, 37. Each tower is, of course, double, on account of the double wall. At the gates a small court is formed between the walls, to facilitate defense in case the outer gate be forced. The origin of a city-plan like the present should be sought not in a mountainous country like Greece but in a flat land like the valley of the Euphrates.

Construction.—The walls are all built of unburnt bricks on a foundation of chirite. They are strengthened internally against cracking by a diagonal network of wooden beams. In the construction of the foundations,

the larger stones are used on the outside, the interior being filled with variety of material. The facing, however, can hardly be called polygonal but an irregular form of squared blocks. The foundation rises to the ground-level; above it begins the diagonal direction following the wooden network. In the walls, from 3 to 6 met. thick, beams a foot thick are placed one foot apart; in walls of lesser thickness slenderer round wooden ties are placed at distances from one another equal to their diameter, even in walls only one metre in thickness. The spaces between the beams are filled in with small stones and earth, so that, in digging through the walls, are found diagonal canals in which are now and then carbonized remains of this framework. The unburnt bricks are usually 30 to 40 cent. square and 10 to 15 cent. thick, laid irregularly in about a finger of mortar. The walls are faced everywhere with clay or lime or gypsum. To guard against the destructive action of the weather on the lower part of the walls, the lower courses are, in important structures, faced or rather trimmed with upright slabs of stone which rest upon a course of flat stones: they soon became decorated with series of basreliefs—a custom that spread over the entire East.

Of decorative stonework the other most important instance is in the columns, two bases of which were found *in situ* in the upper (nw.) palace, marking the side of the porch preceding a series of halls. The method of arranging these two parallel halls is a special characteristic of Sindjirli, and is best studied in the upper palace, the latest of the four main structures. Here is a square court on two of whose sides is a small subordinate structure; on a third side an open one-columned porch and parallel with it the closed main hall and adjoining it several minor rooms. This system of an open portico on the court is still in use throughout the East, even in Syria, and is called the *Liwan*. To the nw. of the upper palace lies a smaller structure, which has likewise a portico behind the court and back of it a main hall and on either side minor rooms. The same arrangement is found in the western palace, where, however, only a part of the court and the building west of it and the portico-entrance to the northern structure have as yet been excavated. The period of this structure is the time of Tiglath-Pileser III. The same ground-plan is visible in an older structure which was destroyed and replaced by the "upper palace." Its walls were colossal in size. The front hall was enclosed by two towers measuring some seventeen metres in plan. This structure must have been for religious purposes.

History and Discoveries.—Dr. von Luschan judged that the city and acropolis were destroyed in about 550 B. C., perhaps by people of a different race that lived, at a few hours distance from Sindjirli, in a citadel built of Cyclopean walls. Since then, the ruins have been almost continually inhabited. Small objects to the number of three thousand were found,

some of which show analogies to Trojan and others to prehistoric antiquities: of a non-metal age there was no trace. A large series of weights was found, some of which would indicate a decimal system. There are seals, ornaments, arms, lamps, stamps, cylindrical stones, pearls, fibulas, needles, vases of home and foreign (perhaps even Cypriote) manufacture. The necropolis lay without the walls; only five tombs were discovered. The bodies were placed, in a crouching attitude, in earthen jars. One sepulchral chamber built of heavy dolorite blocks, and otherwise entirely empty, yielded a very important relief. The early Shemitic inscriptions found would seem to indicate that the Hittites were Shemites, but Dr. von Luschan is of the opinion that the excavations show that the Hittites are of pre-Shemitic origin, like the Sumero-Akkadians in Babylonia.

Professor Schrader dates the raising of the stele of Essarhaddon in Sindjirli between the years 670 and 668. The connection with Assyria, shown by the Assyrian inscriptions and seals found, ends with the fall of Nineveh in 607, and the monuments that can be dated belong to the flourishing Assyrian period between the seventh and the ninth century. What is earlier cannot yet be surely estimated. The inscription on the monument of King Panammu is shown, from Assyrian documents, to belong to the reign of Tiglath Pileser III (745-727). The old-Shemitic letters read merely *P-n-m-u*, the spelling being completed as to the vowels by the cuneiform inscriptions. The name of Tiglath Pileser occurs also in Panammu's inscription. Both kings came at a critical period. Tiglath Pileser saw the fall of the many small kingdoms in Asia and the foundation of a single empire. Panammu came at the close of a period of independence: his kingdom was annexed by Assyria in 723. His inscription, the second in date of old-Shemitic inscriptions, must date from 730, and is thus about 120 years later than that of Mesa. The early Shemitic inscriptions of Sindjirli will give most important material for a reconstruction of the ancient Aramaic.

The excavations are not finished as yet, and a campaign of seven or eight months is judged necessary to complete them.

Sculptures.—Among the sculptures two classes should be radically distinguished, those of native art, and the direct Assyrian importations. Essarhaddon (681-668), who conquered the whole of Syria, erected a large, well-preserved stele of victory, in shape like a short obelisk with rounded top, whose flat face is covered with a relief and cuneiform characters. The king is in profile to the right, holding in his left hand a rope by which are bound two small dwarf-like figures, reaching about to his knee, of the conquered king of Egypt, and (in even smaller dimensions) the Syrian prince. They are gazing prayerfully up at the conqueror. The Egyptian has manacles on his feet, the Syrian on his hands, and the rope by which they are held goes through their lips. The inscription speaks of the conquest of Egypt.

In contrast to this Assyrian work are the native sculptures; still they are under Assyrian influence in their general treatment. This is especially the case with two pairs of colossal lions carved in stone, which flanked the gateways at Sindjirli—one rude, the other of better art. They are impressive, with a peculiar combination of stiff archaicism and powerful naturalism. The rigid attitude shows them to be not independent but parts of a monumental structure, the naturalistic treatment of the head, shows the hand of the mountaineers. The head is not at rest but has just given forth a powerful roar, as if it had caught sight of an enemy; nose and upper lip are wrinkled, the eyes half closed, the ears drawn back, the jaws so wide open as to show all the teeth, each one characteristically reproduced. One gets the complete impression of an angry animal about to spring upon the foe. As at Kuyundjik the lions show themselves in relief as one passes through the portals. One pair of lions is of this fine art, at once impressive in its general features and careful in its details. The other pair is of ruder workmanship. That the rude style is the earlier would appear from the discovery, on one of the finer lions, that the right hind foot is left in this rude style in such a way as to show that these lions also were originally as rude as the others and that the stone was re-carved with more advanced art, reducing the lions somewhat in size. These lions are examples of the highest perfection of the art of Sindjirli.

Next to them in interest are two votive statues. As works of art they are very poor; historically their importance is unique. Each statue is accompanied by an early Aramaic inscription, already alluded to. The first campaign had yielded one statue of Panammu, king of Sam'al, as this kingdom was styled, which was set up by his son. A second one has been since discovered, remarkable for the perfect preservation of its head. The beard is in rows of curls after the Assyrian fashion, the whiskers being shaved. On the head is a round cap decorated on each side with two horns, as in Assyria.—CHR. BELGER, in *Berl. phil. Woch.*

KYPROS.

RICHTER ON CYPRIOTE ARCHÆOLOGY, ESPECIALLY AT TAMASSOS.—At the May meeting of the Archæological Society of Berlin, Dr. Ohnefalsch-Richter reported on the results of his excavations in Kypros for over ten years, especially those of Tamassos, where he made in 1889 important discoveries for the Berlin museums. The main subject of his study was to give a picture of the history of Cypriote culture and art. He first distinguishes two main periods. There being no iron in the tombs of the earliest period, he terms it the copper-bronze age. Outside of the few objects of precious metals, all objects in metal are of pure copper or of bronze containing but little tin. In the second period, iron is introduced beside bronze. As no Oriento-

Phœnician or Græco-Phœnician influence are to be detected in the earlier period, it may further be termed the *pre-Græco-Phœnician age of copper-bronze*, in contrast to the second, which is the *Græco-Phœnician iron age*. In both ages there are many groups and sub-groups, and transitions from one to the other. The period of the transition from the bronze to the iron age is fully illustrated, and partly so by objects in the Berlin Antiquarium.

The copper-bronze age falls into two main divisions. In the earliest, the potter uses no ornamentation whatever, and there is no Shemitic influence. There are close analogies to the finds of Troy=Hissarlik, to the copper age of Hungary, and to an early culture at the close of the neolithic period, during the copper age and at the beginning of the earliest bronze age, which extended across Europe, through Austria and Germany. In the second division, a direct Shemitic influence appears in the introduction of painted decoration in the vases, an influence that comes from Mesopotamia and is marked by the appearance of Babylonio-Assyrian inscribed cylinders, which reach back to Naram-Sin and his father Sargon I of Akkad (c. 3800 B.C.), thus giving valuable material for dating the period. In another group of this second division, two other and contemporary influences appear, one from Mykenai and Greece, the other from Egypt, about in the time between Thothmes III and Rhamses III. At its close, Hittite influence appears to begin, extending, however, far into the Græco-Phœnician iron age. The main objects of the early copper-bronze age are idols always draped and flat. The earliest, entirely or partly nude round idol in the second half and close of the bronze age has also nothing to do with the Phœnicians: it is the same as the figure of Nana=Ishtar on the cylinders from Mesopotamia. By the side of the similarities, there are still too great differences between the Cypriote and Schliemann's Trojan antiquities to allow of Dümmler's proposed identification of the population of the two places. Neither can there be any belief in an inland Shemitic aboriginal population. All the discoveries point to an original non-Shemitic people.

The Græco-Phœnician iron-culture, which begins perhaps in about 1200 and must have superseded the culture of the bronze age in about 1000, falls into three divisions. The earliest is characterized by the bronze *fibula*, which is not found before or after. For Tamassos, the most flourishing period of Cypriote Græco-Phœnician pottery is, at this time, water-birds and even primitive human figures, used together with the geometric patterns.

The second division shows a standstill in the keramics of Tamassos, in contrast to that of Marion=Arsinoë (Polis-tis-Chrysoku). On the other hand, Tamassos reaches in the sixth century a period of perfection in architecture, metal work, stone sculpture, and terracotta figures such as is hardly ever reached in later times. To this period belong the important royal tombs of stone, which in many details show an imitation of wooden

architecture [*N. B.*—A short account of the excavations of Tamassos is given on pp. 196–7 of vol. VI of the JOURNAL]. In or around these stone tombs were found a quantity of arms—iron swords of the Mycenæan and Dipylon types, bronze coats of mail with engraved representations, a helmet with complicated visor, a silver vase with a horse in relief, large bronze kettles, candelabra, engraved gems, silver and gold earrings. To the same series belong an archaic bronze figure found in 1889 in the river Pideas near Tamassos (now in the Antiquarium), some colossal statues of terracotta and large stone statues from the temple of Apollon-Rassaf at Frangissa near Tamassos, found in 1885.

The third division corresponds, in the necropolis of Tamassos, to the decay of Græco-Phœnician art. Statues were found only in the sanctuaries themselves, and they belong to a Græco-Cypriote art of the fourth century. A votive inscription to the *μήτηρ θεῶν*, by the form of the letters and the style of the statue, is proved to belong to the Hellenistic period. Important bilingual Phœnician-Cypriote-Greek inscriptions found by Richter complete historically what is proved by the discoveries in the tombs. As early as the beginning of the fourth century, and perhaps earlier, Tamassos was the capital of an independent kingdom. Some Hellenistic discoveries in the immediate neighborhood of Tamassos have confirmed this political situation. As early as 1889, some very beautiful late-Hellenic gold decorations were found which now belong to the museum of Nicosia. Roman and Byzantine remains bring the history of Tamassos down to the Christian period. Nowhere in Kypros are all periods so successively and fully represented as at Tamassos.—*Berl. phil. Woch.*, 1891, No. 24.

A SACRED HILL OF APHRODITE.—M. Ohnefalsch-Richter writes to the *Berl. phil. Woch.* (1891, No. 31–2): “I am able to give an interesting proof of the existence in Kypros during antiquity of an extensive hill-worship which was introduced into the island by the Canaanites and Hebrews of Syria together with the other primitive stone, altar, tree and grove worships. It illustrates a passage in Strabo IV, 682: ἄκρα Πηδάλιον, ἧς ὑκέρκεται λόφος τραχὺς ὑψηλὸς τραπέζοις, ἱερὸς Ἀφροδίτης. The site of the peak Pedalion is known: it lies south of Salamis and Famagusta and west of Kition=Larnaka. Dr. W. Dörpfeld and I discovered there in 1890, under the lee of the furthest peak, the remains of an ancient hill-cult. From the sloping plateau there rises, near the cape called *To Kao* or *Cap Græco* there rises a pointed mass of coralline limestone. From that point the rock shelves rapidly seaward, but toward the land, where the ground takes the shape of a saddle, there is set against it a life-size stone statue, and over it is a decorative *temenos*. We found a quantity of fragments of statues and remains of primitive walls. From my long experience, I know these to have belonged to the walls of the *peribolos*, which we know

to have surrounded the sacred mountain-groves and precincts, the λόφοι, ἄλση, βωμοί, τεμένη, as Jehovah commanded Moses on Mount Sinai (*Exodus*, xx, 12).

Engel (*Kypros*, i, 98) thinks it probable that the Idalian mountain-grove extended as far as the peak of Pedalion, but the distance makes this impossible, and between them are many fields, streams, and hills. It is not, however, impossible that the Idalian Aphrodite, which became famous like the Paphian, was worshipped on this sacred mount. Cypriote inscriptions have proved, for example, the worship of the Paphian in Chytroi, that of Apollon Hylates near Kourion and in the neighborhood of Arsinoë=Marion and Neapaphos, that of Apollon Amyklaïos=Rassaf=Mikal in Idalion, that of Baal Lebanon in the Cypriote mountains. If it were so, it would explain a passage in Lucian (*Phars.*, viii, 716), *ab Idalio Cingraeae littore.*—*Berl. phil. Woch.*, 1891, No. 31-2.

EUROPE.

GREECE.

A MEDIAEVAL GREEK WILL.—M. Omont communicated to the *Soc. des Antiquaires* (*Bulletin*, 1890, p. 100) a note on a mediæval Greek will remarkable not only on account of the extreme rarity of such documents and the age and high dignity of the testator but on account of the interest of its contents. It is the will of a dignitary at the court of Constantinople, the protospathary Eustathios, who lived in the middle of the xi century. After a long theological and legal preamble, he enumerates all his real estate, and divides it between his wife Anna, his elder daughter Irene, his younger daughter Maria, and his son Romanos. These legacies are accompanied by gifts of various sums of money and special recommendations.

Then comes the detailed enumeration of all the precious objects—about one hundred and fifty—gold and silver crosses, holy images decorated with precious stones, relics and reliquaries, vases and other objects, which he had long since resolved to will to the church of the Theotokos founded by him in Kappadokia. This list of precious objects is followed by that of the books, of which there are about eighty, gospels full of illuminations and with rich covers decorated with gold and silver and enamels, manuscripts of the Old and New Testaments, service-books, collections of works of the Fathers, collections of Councils and texts of canon law, and finally some profane manuscripts, a history of Alexander, an Interpretation of dreams, Aesop's fables, two Chronographies, and a treatise on grammar. The will closes with the mention of funeral services for the testator, and with various legacies of real estate and money, and some pious foundations. The date

is 1059 A. D. The will is contained in the Coislin ms. No. 265 of the Bibliothèque Nationale.

ATHENS.—ALTAR UNDER THE PROPYLAIA.—M. Charles Normand publishes in the *Ami des Monuments* (1891, p. 57) drawings and a note on the altar uncovered in June, 1890, below the marble steps of the Propylaia on the north side, to the left. It is of tufa and rests directly on the solid rock, and is a valuable indication of the use of this region, which is somewhat obscure. It appears to be connected with the old Parthenon, burned by the Persians. The red marks upon it—either of paint or from fire—recall those on the columns and fragments of the old Parthenon.

KRETE.

DR. HALBHERR'S CONCLUSIONS.—Dr. Halbherr has found in the island many evidences of the reflex wave of Asian culture which, travelling from the eastern mainland, affected first the islands of the Mediterranean, and then, as his discoveries in the cave of Zeus on Mt. Ida tend to prove, spread to Greece. The most important of these results are numerous vases of the Mycenæan style, which have been illustrated by Professor Orsi. They are of great size, and sepulchral, and by the novelty of their position and structure furnish us with new ideas on the sepulchral rites practised at so early a date. So far, the peculiar tombs in which these colossal urns have been found in Krete belong to an ordinary rank of life; but others will, in all probability, be found, belonging to chiefs or princes. The existence of such tombs and urns in Krete was hitherto unknown, and will bear out Adler's surmise, that on this island, midway between Egypt, Asia Minor, and Greece, will be found the key that unlocks the mystery at present attending the first intermingling or conjunction of Oriental and Hellenic ideas of art.

These vases were found in *Kuppelgräber* (θολωτοὶ τάφοι) at Milatos and elsewhere, and show that Krete had at that date a population practising the same sepulchral rites and using the same decorative motives as their fellows on the Hellenic continent. Dr. Orsi attributes them to some Asian race, Phrygians or Carians, who can be shown to have influenced Greece in two separate streams: (1) through the islands of the Aegæan; (2) through settlements in Krete. The urns are so large as to resemble modern bath-tubs and are decorated with palmettes and fishes and ducks, all of primitive design, the colors employed being dark-red and chestnut on a buff or cream-colored ground. Though of sarcophagus-shape, they are not large enough to contain the whole body of a man, and it is surmised that at the Mycenæan epoch such urns were made to receive either the bones alone, or the half-burnt body. Hence, partial combustion must have been practised, and this will be the most ancient known instance of an *ossilegium*, but

an *ossilegium* without cremation. As for the style of the decoration, Dr. Orsi attributes it to the later stage of Mycenæan ornament, the third rather than the fourth period, when the artist, without knowledge of perspective or background, was endeavoring to represent a lake-scene in which plants and fishes and ducks appeared together.—*Antiquary*, March, 1891.

ITALY.

VON DUHN ON THE ETRUSCAN QUESTION.—On account of the interest of Frederic von Duhn's remarks on the Etruscan question in the *Bull. di Palet. Ital.* (1890, pp. 108–132) they are here abridged for the benefit of our readers, the writer speaking in the first person.

I. It has been my opinion, for fifteen years, that the creation of a science of the tombs would solve many questions regarding the civilization of ancient Italy. The basis for such a science I believe to be the fact, that in the earliest times the location and temporary alternation of burial by cremation and by inhumation, with their accompanying rites, were nowhere produced by chance, either in the Oriental or Hellenic East or in the Celtic or Germanic North. In Italy, the principal races, with their various groups, held firm to their customs based on religious convictions, until they were separated, and that, when an amalgamation took place, the funerary observances at first clearly expressed the degree of this amalgamation, and, later, it being impossible that different races in the same place should remain distinct, these observances conformed to the race which had the intellectual supremacy. Although there may be exceptions, this I believe to be the general rule. I take for granted an acquaintance with recent works on the subject, especially those by GHIRARDINI (*Not. d. Scavi*, 1881, p. 342; 1882, p. 136), HELBIG (*Annali*, 1884, pp. 108–88), BRIZIO (*Atti R. Deput. di Stor. patr. Romagna*, 1885, pp. 119–234), and UNDSET (*Annali*, 1885, pp. 5–104).

II. Primitively inhumation was everywhere used. *Cremation* was introduced, with the bronze age, into Northern Europe, among the people of India, and the Northern and Eastern Shemites. Among many peoples inhumation remained unaltered; with some cremation held a brief sway, then disappeared. Elsewhere one branch of the race adopted cremation while another retained inhumation. This was done by the Shemites of Mesopotamia as opposed to the inhabitants of Syria, Kypros, and Carthage; thus often the non-Dorians in contrast to the Dorians, the Italics north and northeast of the Apennines, and west of the Tiber and Latin hills as far as the Volsci, in contrast to those dwelling in Umbria and west of the Tiber and the Latin hills, Picenum, and in fact all middle and lower Oscan Italy, who did not adopt cremation except in a very few isolated spots and even there only for a time. Among the predecessors of the Italics, inhu-

mation was practised by the aborigines, and among the Liguri only a few adopted cremation later. The inhabitants of Italy who used cremation were the following. The dwellers in the *palafitte* of the north; the pre-Euganean inhabitants of the country of the Veneti, who succeeded the aborigines; the pre-Etruscan families east of the Panaro. All these burned the dead and preserved their ashes in urns like those of the Villanova type. In the most ancient sepulchral strata the funerary apparatus, which was avoided for ritual reasons in the tombs of the *terramare*, belongs still to the pure bronze-age, for only south of the Apennines did the Italics learn the use of iron and bronze-plate, a use which they later transmitted northward. The pre-Etruscan inhabitants also of Etruria and Latium, preserving a like kind of tomb, cremate their dead, and maintain that custom even after the invasion of the Etruscans; and, besides, they sometimes, by superior numbers or culture, forced the invaders to accept this rite.

Remarkable discoveries of such tombs according to the crematory rite have been made during the last decade, as at Livorno, Volterra, Vetulonia, Vulci, Corneto, Allumiere, Caere, Cortona, Chiusi, Orvieto, Visentium, *etc.* Excluded from this, still remains the mountainous Etruscan interior, whose centre is the Monte Amiata. In Latium, a number of such tombs for cremation have been found, notably in the Alban hills and in Rome itself. South of the Apennines, the cinerary urn of terracotta or metal was sometimes replaced by a hut-urn (*urna a capanna*). Such hut-urns have been found at Vetulonia, Corneto, Visentium, Allumiere, Rome, and the Alban hills. All these tombs for cremation both north and south of the Apennines have so much in common that no one can deny either the community of rite, or the historico-artistic and ethnologic unity. Furthermore, the earliest are evidently in the north; and thence came what appears to have been a slowly progressive immigration.

III. In **BOLOGNA** inhumation and cremation stand notoriously in the following relation. The pre-Italic tombs for inhumation are followed by those for cremation of the Villanova culture, which prevail for several centuries until, in about the middle of the sixth century, inhumation reappears, with the adoption, however, of funeral rites different from those of the earlier pre-Italic inhumation; and, finally, in the fifth century inhumation preponderates, as is shown by the Certosa group (cremation 130; inhumation 287), the DeLucca group (cremation 32; inhumation 79), and the rest. A similar relationship is maintained during the Gallic period, beginning in the fourth century. It results that the sudden appearance, at the close of the Villanova period, of the rite of inhumation and the gradual disappearance of inhumation coincides with the entrance of the Etruscans, who certainly buried their dead. We may conclude:—
(1) the Etruscans used inhumation, at least those north of the Apennines:

(2) wherever we find, in Etruria proper, first cremation and then inhumation, we may well inquire whether the diversity should not be explained ethnologically: (3) it being admitted that the difference in rite is owing to difference of race, then the inhabitants of the Valley of the Po, the predecessors of the Etruscans in Etruria proper, and the inhabitants of Latium, especially the Alban hills, all belong to the same race.

IV. CORNETO.—The surest proof of the alternation of the Italic crematory tombs or *tombe a pozzo* with the Etruscan tombs for inhumation is found in the necropolis of Corneto. By the side of the tombs for cremation, which predominate exclusively up to about the middle of the eighth century, appear the first tombs for inhumation or *tombe a fossa*, with which are soon associated the *tombe a cassa* and a *corridoio*; while the hall-tombs (*tombe a camera*), of which these three types are the precursors, are hardly met with before the sixth century. But the tombs for inhumation do not at once and everywhere take the place of those for cremation, as was long supposed. Inhumation continues, but in a decreasing ratio, first in the old fashion in *tombe a pozzo*, then more simply in *tombe a buca*, as can be seen during several centuries at Visentium, Veii, etc. At times, crematory tombs are found within tombs for inhumation, as if there were a split in the family, or rather as if the dependents, of foreign race, were cremated. The well-tombs (*tombe a pozzo*) represent an advanced Villanova culture, enriched with iron and with objects in bronze plate, probably brought from the East by Phœnicians, as well as with the *fibula*, and with other objects of undoubted Phœnician character of precious metals, glass, enamels, etc.

The families to whom belonged the earliest tombs for inhumation (*a fossa* and *a cassa*), being along the coast, were first acquainted with many of the above objects, and their tombs therefore contain a class of objects substantially the same as that of the well-tombs but with a character at once richer and more warlike, as is shown by the Tomb of the Warrior. These trench-tombs (*a fossa*) appear to be less ancient in comparison with the greater number of the well-tombs, because in them, except in the very earliest, there begin to appear Greek imported objects, among them especially the proto-Corinthian vases and their relatives of the geometric style. The period of their appearance is determined by the beginning of Greek colonization on the eastern coast of Sicily and Campania, because this style of vase is the earliest that is found there, and retains the mastery for a long time in the Fusco necropolis of Syracuse, at Megara in Sicily, and in the earliest tombs of Kyme. In the necropolis of Selinous, founded at latest in the second half of the seventh century, these proto-Corinthian vases are no longer found, but only those of Corinthian style.

These conclusions, drawn from Corneto are confirmed by the Alban necropolis, for its earliest or northern group, which is closest to the well-tombs of Corneto, is entirely without Greek imported objects, and therefore may be considered anterior to the foundation of the Greek colonies. In the southern group, on the other hand, proto-Corinthian and related vases begin to show themselves. The following deduction should therefore be added to those previously drawn; namely, that the population with the rite of inhumation, that is the Etruscan, established itself at Corneto in about the middle of the eighth century, and that it not only did not expel or exterminate the Italic inhabitants but tolerated them and even respected their tombs in constructing their own. The invaders were even influenced by the customs and worship of the conquered, and adopted, with Italic names, the cult of certain Italic divinities, such as Neptune and Minerva. Their tombs soon were distinguished from the Italic by a greater richness of contents, which, a century and a half later, displays itself most brilliantly in the tombs of Caere, Vulci, Veii, Vetulonia, *etc.*, in objects of luxury most of which were purchased or imitated from the Phœnicians.

V. Turning southward, we find that, in the Alban necropoli, cremation continued to be the rule, showing that here the Italic population remained pure. This was not the case in the northern plain. In 1889, an oak trunk was found at Gabii, hollowed out to receive a body with its decoration and funerary vases of the beginning of the seventh century. Similar use of inhumation is found in tombs of this century at Falerii and Rome, where inhumation came to preponderate during the course of the sixth century. At its close, it suddenly and completely ceased, being replaced by the tombs for cremation which Lanciani terms *sistema delle arche*, and which remains the rule up to the second century. This sudden change from inhumation coincides with the fall of the Etruscan dynasty in Rome and the subsequent struggle for liberty in which the Etruscans were banded against the Italics and the Greeks. Thus Rome, from being an Etruscan city with an Italic substratum, returned to being a city politically even Italic, threw off Etruscan yoke, customs, religion, and returned to cremation after having used inhumation for two hundred years (700–500 B. C.).

VI. Turning northward from Corneto, we find a difference in the relation of the two kinds of tombs. At the neighboring Vulci the two rites were practised simultaneously for some time, showing that its Italic population resisted the foreign invasion for a longer period than Corneto, which was their earlier conquest. Later, inhumation became the rule there. In the upper part of the valleys of the Fiora and Albegna, nearer the Monte Amiata, no ancient cinerary tombs have been found. As one ascends along the coast, the relation between the two rites shows in increasing ratio a long and effective resistance of the Italics against the Etruscan invaders. At

Vetulonia all the most archaic tombs are for cremation. It would not be correct, however, to think that Vetulonia remained Italic down to 400, for part of the contents of the famous *Tomba del Duce* of the close of the sixth century are certainly Etruscan. The habit of surrounding tombs with circles of stones is also one current in Etruscan districts, and is not used by the group of Italics who used cremation. But it is true that the *urne a capanna* and the well-tombs of the Villanova type, both purely Italic, lasted here longer than at Vulci. The Etruscans, who in this region extended their power later and more slowly, met with an Italic population of high intellectual culture, and were obliged to accommodate themselves to circumstances and to burn their dead. This adoption of foreign customs by the Etruscans of Vetulonia is especially shown by the rectangular form of the funerary box for the ashes decorated with silver, a reduction of the large wooden boxes in earlier Etruscan use. Vetulonia explains what had been observed also at Volterra, where inhumation in Etruscan *hypogea* succeeded Italic cinerary tombs without displacing them. The important fact is, that here also as in Rome there was a return to cremation: many tombs constructed on the plan of the rite of inhumation have received urns for cremation. This general fact and the uninterrupted course of cremation at Vetulonia can be explained only by admitting that there was in these localities a current from the Italic substratum powerful enough to obliterate gradually the imported Etruscan customs.

VII. The eastern section of the country gives some interesting points of comparison. The earliest tomb for inhumation (Sergardi) at Cortona is not earlier than the middle of the sixth century. Only a little before this time must it have been occupied by the Etruscans in their march northward over the Apennines. More to the SE. is a country that remained essentially Italic, that part of Umbria, including Perugia, that lies west of the Tiber. Here inhumation never took root. Chiusi, the Italic Clusium, with its populous neighborhood is extremely instructive. Undset remarks: "Here in the interior of Etruria the development is entirely different from that at Corneto. At Chiusi there are no tombs *a fossa* or *a cassa*; in the *tombe a ziro* we here find the objects that characterized that class of Etruscan tombs. At Chiusi the earliest funerary rite, that of cremation, lasts longer than at Corneto; the *lekythoi* with brown lines are here often found in tombs for cremation, while in Corneto they begin to appear only in tombs for inhumation." It therefore appears that the earliest tombs for inhumation at Chiusi, those of the Pania and Fonterotella properties, need not be dated before the middle of the sixth century, and that they precede only by a little the first painted chamber-tombs. Here also we conclude that the Etruscan occupation of these regions did not happen before the middle of the sixth century.

The *canopus*, considered by many to be characteristically Etruscan, is however a cross of Italic and Etruscan influences: it is derived from the Villanova ossuary, from its bronze substitute, from the hut-urn (*urna a capanna*), and continued to be a cinerary vase during the Etruscan invasion, developing even into the shape of complete human figures. Among them, the urns are earlier, the sarcophagi later. With them are to be associated the many cinerary cases which we should regard as concessions made by the Etruscans to popular customs of the native population.

VIII. If these facts have any value, it must be admitted:—I. that in Etruria the great longitudinal valleys, as well as the coast-line, were originally occupied by the same Italic races that dwelt in the country north of the Apennines and in Latium: II. that about the middle of the eighth century, perhaps a little before, the Etruscans appear, first at Corneto and in its neighborhood to the south, east, and northeast; that in about 700 they invade Latium and hold Rome until about 500, and perhaps for the same period the entire region up to the Alban hills, but with an insecure hand: III. that at the same time, perhaps about 700, they extend northward toward Vulci, and in the first half of the century push beyond Vulci northward up to Vetulonia and Volterra. Only in the following century do they extend themselves eastward, first from Volsinii (Orvieto), which they had previously occupied, northward in the Valdichiana to lake Trasimeno (occupying Perugia still later), in the upper valley of the Arno, and thence by the Futa pass to Bologna, *etc.* The nucleus of the national Etruscan power and genius was in the south, in the country extending from Monte Amiata southward to the Tiber. The land south of the river was only occupied temporarily by them, and that to the NW., N. and E., occupied at a later date, though politically subject to the Etruscans, never completely became an Etruscan possession.

Reference may here be made to a passage of Dionysios in the history of Tarquinius Priscus. The Latins, when menaced by the Tarquins, sought aid, against these Etruscans, from the Sabines, their Italic relatives, and from the *Tirreni*, five of whose cities came to their aid: Clusium, Arretium, Volaterræ, Ruscellæ and Vetulonia. This seems natural, now that we know that toward 600 these cities were just those that still remained Italic. After the Etruscans had gained possession of these cities, Porsenna made his attempt to reestablish the Etruscan power in Rome, and its failure made of the Tiber the regular boundary between free and Etruscan Italy.

IX. It is not my purpose to speak of the origin of the Etruscans, nor do I believe in the simple hypothesis of the emigration of an entire nation by sea. The chronologic computation of the Etruscans embraces a plan that could be used only when the nation was concentrated, when each member was known to the other and to the priests. Its calculations would

lead us to fix on the middle of the eleventh century as the period in which the invading Etruscans established themselves in the heart of the region afterwards called Etruria. It is not surprising that nearly three centuries of pacific development passed before the Etruscans felt the need of extension, and did so, as was natural, by following the valleys that led to the sea in order to gain the coast. It is possible that they originally came from the east; but it is impossible to decide whether they entered Italy before the Italics and were thrust southward by them into the hilly Etruscan interior, or whether, arriving after the Italic tribes, they opened a way through them.

AREZZO=ARRETIVM.—**AN ANCIENT WELL.**—Outside the walls of Arezzo, to the NE., about ten metres within the old Etruscan walls, Sig. Occhini has discovered and explored an ancient well. It was covered by a large slab, 1.30 met. wide. It grew wider as one descended, taking the form of a long wine *amphora*. Below the depth of fourteen metres, many vases were found. The upper ones were of ordinary style belonging to the late Roman Empire, usually urns with one handle and projecting lip, of which more than fifty were found. With them were four copper pails with high iron handles badly oxydized, varying in shape and in size from 19 to 24 cent. At a depth of between 17 and 18 metres was found a beautiful bronze pitcher which was originally gilt. Its height is 21 cent., width at mouth 9 cent., with an elegant handle ending in the middle of the vase in a head and bust in relief of a female divinity identified with Diana by the quiver over the right shoulder. Its artistic style refers it to the first century of the Empire. At the bottom of the well lay a brilliant copper pail with a bronze handle ending in a goose-head, turning over the edge between two projections and decorated where they join the vase with a vine leaf in relief. This is Etruscan work of the second or third century B. C. The pail rested on three small bronze bases soldered to it, and is of large size, 25 cent. high, 19 cent. diameter. Also in the bottom was found a large iron key, 30 cent. long, similar to another found in an Etruscan fountain near Arezzo. A third key of bronze was found in an Etruscan well near Chiusi. A fourth of silver and of great beauty was found at Brolio (Valdichiana) among Etruscan objects. Comm. Gamurrini suspects that on the destruction or de-consecration of a temple, the key was cast into a neighboring well or fountain as something sacred that should not be used. This conjecture is favored by their great size and elaborate form. Also in the bottom were two lamps, one of earth, the other, very elegant, of thin copper; two leaden shells, probably for coins; a votive bronze tablet with a figure scratched. Only a few coins were preserved, such as one of Hadrian and one of Maximianus. Further proof of the existence, in this neighborhood, of a small temple was given by a channelled colonnette of

travertine that may have belonged to its *pronaos*, and some fragments of terracotta *acroteria* ending in palmettes and of antefixes with heads; also remains of white tessellated mosaic, and many pieces of *aes rude*. Probably the temple was dedicated to Diana, as was indicated by her effigy on the bronze pitcher.—*Not. d. Scavi*, 1891, pp. 159–60.

ODERZO (VENETIA).—MOSAIC PAVEMENT.—In February, a polychromatic Roman mosaic-pavement was found in a field near Oderzo. It is 6.70 met. long, 4.06 met. wide at one end and 2 met. at the other. Its border consists of four successive zones of Greek pattern of varied design. It is divided lengthwise into three zones, each of which has three subdivisions across the width. In the upper zone on the left (2.70 wide, 1.30 high) is a hare followed by a hound while the fore-part of another hare emerges from a bush, and there appear the head of one horse and the hind-quarters of another. The composition in the middle of the upper zone (1.95 long, 1.30 wide) represents an enclosure surrounded by walls with a portico at the end and an open door in the centre, within which is a woman feeding two geese and two hens. The composition on the right (1.30 wide, 1.60 long) represents that kind of bird-snaring which is called a *civetta con panione*. The owl is half hidden in a bush, and above it are six birds, three of which are caught in the snare. Owl and birds are admirable in coloring and design. The lower zone is almost entirely destroyed. There remains only a man armed with a lance, facing a boar, then an arm and the legs of two figures. The technique of the work is delicate, and the colors fresh and bright.—*Not. d. Scavi*, 1891, p. 143.

ROMA.—SARCOPHAGUS.—In digging for a drain on the Via Salaria near the gate, was found a marble sarcophagus. Its front is striated: in the central shields are two busts, the heads being only roughly sketched, representing a senator (with toga decorated with *trabea*) and his wife. Below them are two shepherds; one seated, milking two goats, the other standing, leaning on his crook and playing on the pipe. At each corner is a fine single figure in high relief—on the right, a bearded man in pallium; on the left, a woman in tunic and pallium. On the sides are the usual guardians of the tomb, the griffins.—*Not. d. Scavi*, 1891, p. 166.

SAN MARZANOTTO.—A ROMAN NECROPOLIS.—Traces have been found, in the territory of San Marzanotto in Liguria, of a necropolis of the Roman period in which the rites of both cremation and inhumation were used, and which was in use for several centuries, as is shown by coins ranging from Augustus to Constantine II.—*Not. d. Scavi*, 1891, pp. 144–5.

TONTOLA (near Forli).—A pre-Roman tomb found in Tontola, 22 kil. from Forli, yielded a number of vases, some of which are similar to those found in Gallic tombs; nearly all were of black varnish, a few with light-green. They were arranged about a skeleton.—*Not. d. Scavi*, 1891, pp. 145–7.

SWITZERLAND.

BASLE.—DR. BURCKHARDT, of the Basle Museum, has lately rediscovered a collection of over a hundred wood-blocks by Albrecht Dürer that have been lost sight of for some years. Three of the blocks have been cut; the rest, which were evidently intended for a book which was never published, are uncut, and are each about fifteen centimetres by nine. One larger block is signed at the back by Albrecht Dürer, with his name in full; the rest are without signature or monogram.—*Athenæum*, Oct. 11.

GENEVA.—MUSEUM AND PICTURE GALLERY.—M. GUSTAVE REVILLIOD has left, by his will, to the city of Geneva a museum which he built and filled with works of art at the expense of four millions of francs. It is at the city-gate and is called *Musée de l'Ariana*. It contains works of painting and sculpture, ceramics, metal, ancient furniture and rare books. The city also receives a gallery of paintings, valued at several millions, left to M. Revilliod, a few hours before his death, by Mme. Fleuriot.—*Chron. des Arts*, 1891, No. 1.

VEVEY.—The workmen engaged upon the sewerage at Vevey have unearthed, near the church of St. Clara, a bronze statue of Neptune in excellent preservation. The *Feuille d'Avis de Vevey* observes that this spot was the centre of the ancient Vibiscum. In 1777, when the church of St. Clara was being "restored," the workmen excavated a Roman altar of white marble with the inscription DEO SILVANO.—*Athenæum*, Oct. 18.

GERMANY.

ROMAN WALL.—*A complete excavation of the Limes Romanus.*—At Heidelberg, a meeting took place on the 28th ult. in the University Library between the representatives of Prussia, Bavaria, Würtemberg, Baden, and Hesse, as also of the Academies of Berlin and Munich, in consequence of the commission received from the five German governments for united excavation of the Roman boundary-wall, which bears so close a resemblance to our own Northumbrian *vallum*. Amongst those present was Professor Mommsen; and two directors (one military and the other an archæologist) were determined on, and a period of five years was fixed for the termination of the work.—*Athenæum*, Jan. 10.

The projected excavation of the *Limes Romanus* will be carried out by the combined efforts and subsidies of the five German governments through whose territories it passes, in as thorough and comprehensive a manner as possible. During the five or six years required for the work the course and direction of the earthen wall will be accurately determined, and its construction, design and front view will be studied, when possible, along its entire length; as also, by means of excavation, the *castella*, towers, gates,

and bridges where the barrier went across the river. Research will also be directed to any Roman buildings or their remains contiguous to the wall or forts (*castella*), as the *scholæ*, baths, the springs utilized, wells, *etc.*; and then to the Roman stations near the *vallum*, the ancient roads running alongside or in connection with the *Limes*. All antiquities found in the excavations will belong to the several states in which they are respectively found; but plaster facsimiles will be made of the principal objects and placed in the museum at Mainz. The results of the undertaking will be published yearly.—*Athenæum*, Feb. 14.

BERLIN.—THE GERMAN ARCHÆOLOGICAL SOCIETY IN BERLIN.—July Meeting.—The papers read were as follows: KEKULÉ, *The form and decoration of the earliest Greek and the pre-Greek vases*.—TREU, *Male torso found at Olympia in 1878* (*Ausgrab.*, III, pl. 17^b, 2). By means of a better-preserved replica in the Dresden collection (Clarac, 549, 1156), this torso is shown to be an Asklepios, and an Attic work of the close of the fifth century and of the school of Pheidias. It may be a replica of the Asklepios of Alkamenes; but at all events it confirms Overbeck's idea that the classic type of Asklepios originated in the school of Pheidias.—POMTOW, *A three-sided base at Delphoi*. Of this base and its inscription five blocks and eleven small fragments have been found. The inscription, in Ionic dialect, indicates that the monument to which this base belonged was a replica of that dedicated by the Messenians with the Nikê of Paionios: this would illustrate the close relation between the two religious centres of Greece, Olympia and Delphoi.—WINTER, *The relation of the Mycenaean monuments to Egyptian and Hittite art*. He believes the Mycenaean civilization to have originated in Syria and to have flourished between 1600 and 1200 B. C. As an illustration of Egyptian influence, a Cypriote bowl is mentioned wrongly described as Phœnician: its fantastic figures, as well as those on some Island-stones and a Tiryns painting, are adaptations of the Egyptian sacred hippopotamus Thueris. Hittite influence is asserted not only in details of arms, hair, *etc.*, but also in composition.—TRENDELENBURG called attention to the description of the *Mausoleum of Halikarnassos* in Pliny, xxxvi. 30 *sqq.* He seeks to accord Pliny's measurements with the reconstruction of the remains of the monument, and to make further suggestions from the text. He is opposed to a heavy, high basement, and thinks that the singularity of the monument arose in its pyramid being supported on a peripteral chamber.—*Berl. phil. Woch.*, 1890, Nos. 35, 37.

DRESDEN.—THE MUSEUM OF ANTIQUES.—A number of additions to the museum may be chronicled. A mummy-portrait from the Fayûm, from the Graff collection, interesting as showing a rough tempera portrait of a man painted over a beautiful encaustic portrait of an old woman. Prince Fred. Augustus has donated two Palmyrenian tombstones with late Roman

portraits and inscriptions. A large number of terracottas from Myrina and Tanagra have been purchased, also some gold decoration from the Fayûm. The collection of casts will soon be reöpened in its new quarters, the Albertinum, with many notable additions.—*Berl. phil. Woch.*, 1890, No. 35.

KREIMBACH.—THE HEIDENBURG.—The excavations carried on by C. Mehlis in the "Heidenburg" near Kreimbach are described by him in detail in the *Berl. phil. Woch.*, 1890, No. 45. It is undoubtedly a late Roman fortress. Parts of its western, southern, and northern walls were uncovered. Among piles of refuse and small objects found by them were about sixty bronze coins, especially of Constantine, while some were of Magnentius and Constans as well as of Postumus (259–68). Of the bronze ornaments found many were quite well executed. The vases all belong to the period between the close of the third and that of the fourth century A. D.; some of them show decorative motives which were afterwards characteristic of the Merovingian period. These discoveries, together with those of Heideisburg, Obrigheim, Eisenberg, Ungstein have brought to light a series of objects such as must have been the means of connecting directly the ornamentation of late Roman pottery with that of the Merovingian period. An account is given of various remains of architecture and sculpture, graves, coins, etc.

An account of the results of further excavations begun on Sept. 17. Their object was the systematic clearing of the west side where nothing had been done except to search for graves. The wall was found to be continuous, and in connection with it was found a votive inscription of the second century A. D. At the sw. corner was a square tower. The usual number of potsherds and coins came to light.—*Berl. phil. Woch.*, 1890, No. 47.

STRAUBING.—At Straubing, in Bavaria, some Celtic tombs have been opened, and found to contain most interesting bronze ornaments and iron weapons belonging to the people of Rætia before the Roman conquest. The long-sought-for Roman cemetery has also been discovered—through the unearthing of a Roman tomb containing cinerary urns—flanking the old military road from Serviodurum (Straubing) to Abusina, both situated on the Danube.—*Athenæum*, Nov. 22.

TRIER.—An interesting series of objects found in excavations at Ehrang, near Trier, have been added to the museum of that city. They include a statue of Wotan; a sword and an urn; an equestrian statue that probably formed part of a votive column consecrated to the contest of Wotan and Jupiter. The socle of the statue and a capital have been found, the former being decorated with figures of gods.—*Cour. de l'Art.*, 1890, No. 35.

AUSTRIA-HUNGARY.

ALTENBURG=CARNUNTUM.—**DISCOVERY OF AN AMPHITHEATRE.**—Professor Hauser, under whose direction the Carnuntum excavations are carried on, had for a month past observed the color of an extensive cornfield,

which varied in every part. He found an elevated post of observation, and, after a week's close attention, declared it to be his opinion that the cornfield was growing over the site of an ancient amphitheatre. His drawings showed that the oblong centre piece was somewhat concave, and the corn was quite ripe in that part, because there was much soil between the surface and the bottom of the theatre. Elliptical lines of green, growing paler the higher they rose, showed the seats, and lines forming a radius from the centre showed the walls supporting the elliptical rows of seats. The professor waited impatiently for the corn to ripen, and the moment it was cut the excavations began. They have shown that the almost incredible suggestion was perfectly correct. Six inches below the soil the top of the outer wall was found, and from there the soil gradually grew thicker until the bottom of the arena was reached, the pavement of which is in perfect condition. From the theatre a paved road leads to the Camp of Carnuntum. As soon as the theatre has been entirely freed of the soil covering it, all the measurements will be taken, and it will be ascertained what arena it is.—*London Times*, Oct. 4, 1890.

GALLICIA.—PALÆO-ETHNOLOGIC RESEARCHES.—The October-1890 number of the Cracow *Bulletin* reports on G. Ossowski's review of palæo-ethnography in Galicia. He distinguishes three archæological zones, one western, that of Cracow, and two eastern, those of Leopold and Podolia. His investigations were directed to: (1) CAVERNS; at Stradecz (dist. of Grudek), Rosolin (dist. of Lisko), Urycz (Stryj), Kozary and Sarnki (Rohatyn); all except the last two being of especial interest. (2) PREHISTORIC STATIONS; at Zabince (Husiatyn), Zablotce, Hucisk and Wysock (Brody); all of which were recognizable from their fragments of hand-made vases, and objects in bone, silex, glass or bronze. (3) TUMULI, which are a peculiarity of the zone of Leopold. Several of these he has excavated (*a*) at *Tenetiki* (Rohatyn) four tumuli for cremation, in which he found several undecorated funerary earthen vases containing bones: (*b*) near *Uwisia* (Husiatyn) where out of three tumuli he tried only two, and only in one was a skeleton found; also a vase with a handle and some decoration and a discoïdal pearl of yellow amber: (*c*) at *Zablotce*, a tumulus with three unburnt skeletons laid on stone slabs. (4) TOMBS FOR INTERMENT, two of which were in the village of *Uwisia*: one contained, under an immense stone slab, a male skeleton of dolichocephalic race. (5) TUMULI FOR CREMATION: of this variety is a peculiar prehistoric cemetery opened in the village of *Wasilkowce* (Husiatyn), which covers several hundred square metres. The tombs are all placed under a continuous layer, 40 cent. in thickness, of formless earthen bricks. The vases found are in their decoration like the painted vases of Horodnica described by Kopernicki.

DENMARK.

COPENHAGEN.—NEW MUSEUMS.—There are at present being erected in Copenhagen a new Meteorological Museum, a Polytechnic Institute, and the great Museum of Arts, in which the valuable collections from the late Christiansborg Palace are to be placed. Also arrangements are being made for the erection of a new museum of arts and industries.—*Builder*, Aug. 30.

TURKEY.

DOBRUTSCHA.—TRIUMPHAL MONUMENT.—M. Geffroy announced, to the meeting of the *Acad. des Inscriptions* of Jan. 23, that M. Tocilescu, former member of the *Ec. prat. des hautes études*, had discovered at Dobrutscha a triumphal monument erected by Trajan in 108 or 109 A. D. Some of the sculptured trophies represent barbarian prisoners in chains.—*Ami des Mon.*, 1891, p. 105.

SALONIKA.—DAMAGE TO THE CHURCHES BY FIRE.—We quote from the *Times* the following report, received from the architectural students of the British School at Athens:—

“Salonika, October 28, 1890.

Church of St. Sophia.—“Of the many churches of Byzantine times still remaining in Salonika, that of Saint Sophia is the only one that has been at all affected by the recent fire. The report that it had been destroyed is entirely unfounded; and, although a good deal of irreparable damage has been done, the building is still structurally sound and capable of being repaired. None of the original work of the church has been injured, except the marble pillars and the fine carved capitals of the arcades dividing the central area from the aisles and galleries; of these only three of the lower arcade on the north side have escaped injury, the others are more or less irretrievably damaged. And this is partly due to the large accumulation of public records, which had been stored in the southeast corner of the building, having been all consumed in the fire. The lead covering of the main dome has been somewhat injured, and all the roofing, which was of wood covered with lead, has been destroyed. This, however, was not of Byzantine times, the external appearance of the church having been much altered by the Turks, who raised the aisle walls to a uniform level all around, and covered in the whole building with a new roof, sloping up to the sides of the central dome and entirely hiding many of the main structural lines. The open colonnade along the west front, which was also added by the Turks, has been in part destroyed, and the conical roof of the minaret has been burnt off and some damage done to the staircase in its interior. The northwest turret, usually assumed to be of Frankish times,

is practically intact, only a few tiles having fallen from its roof; but the wooden porch and staircase built by the Turks against the south door of the narthex have been entirely destroyed.

"The heat of the fire has loosened the plaster from the walls in many places, exposing interesting points of detail which were before invisible. In particular, one important point which we now see clearly is the evidence of the existence of at least five large openings in the west wall, and in two of these openings remains of frescoes covering the soffits of the arches through the whole thickness of the wall, thus showing that the openings had not been filled in with doorways, and that an exonarthex must have existed, which may have been removed by the Turks when they built the present colonnade. It is now possible also to identify most of the original Byzantine round-arched windows which the Turks had built up or filled in with square stone frames.

"The mosaics seem practically uninjured. They are at present very indistinctly seen through a thick coating with which the smoke of the fire has covered them. In the mosaics of the dome, the subject of which is the Ascension of Christ, we can now see that the faces have all been picked out by the Turks; but otherwise they are in their original condition, although there are some traces of later restoration on the band of flowers and fruit which runs round the lower part of the subject.

"We found the drawings of this church, which were published by Texier and Pullan in their *Byzantine Architecture*, to be very inaccurate and misleading; and we therefore considered it desirable to take advantage of the present circumstances to make a new and complete survey of the whole structure and carefully record all the new evidences which the effects of the fire have revealed.

Church of St. George.—"The round church of St. George, now known as the Orta Sultan Osman Mosque, has lately undergone a complete restoration and renovation. The fine mosaics of its cupola, which were in a very dilapidated condition, have been repaired and completed in paint by an Italian, who has supplied the parts which were wanting, largely from his own imagination, and consequently their historical and artistic value has greatly suffered. Many structural details formerly visible have also been filled up or covered with whitewash.

"Of the other *Byzantine churches* in Salonika, it is only necessary here to say a few words. They remain at present undisturbed, and, unless they too come under the destructive influence of a great fire, are likely to last through many future generations. Here, again, the Texier and Pullan drawings are very incomplete; and it would be a matter for extreme regret, in the event of anything happening to these churches, that full and

complete records had not been made.—ROBT. WEIR SCHULTZ, SIDNEY H. BARNSELY, *Academy*, Nov. 22.

RUSSIA.

THE ORIGIN OF ENAMELS IN EUROPE.—M. le baron de Baye called the attention of the *Académie des Inscriptions* (April 25) to decorations of enamelled bronze that were recently found in the government of Kalouga and which were exhibited at the recent archæological congress at Moskow. This discovery is said to throw a new light on the origin of enamelling in European art [It is not said whether these are *Champlevé* encrusted enamels, as is probable].—*Revue Crit.*, 1890, I, p. 359.

KERTSCH (CRIMEA).—GREEK PAINTINGS.—In the neighborhood of Kertsch, famous for the discovery of magnificent and numerous pieces of ancient jewelry some thirty years ago, a further discovery of interest is reported. It is a tomb consisting of three compartments, discovered 14 ft. under the surface. The walls are covered with frescoes representing divinities and scenes of ancient Greek life. They are accompanied by an inscription in archaic Greek letters.—*Cour. de l'Art*, 1890, No. 40.

DISCOVERY OF A CATACOMB.—Laborers in a quarry near Kertsch have discovered a catacomb with a number of inscriptions, emblems, and frescoes. It is in the form of a great hall cut in the rock, supported by thirteen pillars artistically ornamented. One of these pillars bears the following inscription: "The Judge Sorak built this sanctum without removing the human bones found on the spot. May no one touch or desecrate my body, as he who does so shall not enter the realm of the spirits."—*Builder*, Aug. 30.

PODOLIA.—PREHISTORIC RESEARCHES.—The *Bulletin* (Oct. 1890) of the Academy of Sciences of Cracow reports on Casimir Pulawski's archæological researches in Russian Podolia, which describe in detail two prehistoric tombs discovered not far from Kamieniec in the village of Zawadyńce, 25 kilom. from Husiatyn. One was a tomb for interment, without covering-slab, containing a clearly dolichocephalic skeleton unaccompanied by any object. The second was a tumulus, found in another part of the same village, containing two skeletons: by the side of one of these was a small plain earthen hand-made vase, a bone awl, a small hatchet, a knife, two arrowheads, and fragments of silex instruments, which indicate the neolithic period.

Cz. Neyman describes a cemetery near the village of Bolhane (dist. of Olhopol). It contains 31 tombs in two groups: the four that were opened were each surrounded by a stone belt composed of a double row of large slabs. A peculiarity was the protecting of some of the bodies by placing over them hollowed-out oak trunks. Objects in bronze and iron were found.

GREAT BRITAIN.

BIRMINGHAM.—ADDITIONS TO THE MUSEUM.—MR. SAMUEL JEVONS of Birmingham has given to the Art Gallery of that place a collection of illuminated manuscripts, printed books, and carved ivories, which fill two large cases in the Italian Gallery and Industrial Hall of the museum. The books range from the XIV to the XVIII century, and illustrate the development of the typographic craft from that of calligraphy. The ivories include Japanese examples, Christian diptychs and triptychs, and French, Russian, German, and English instances of various kinds.—*Athen.*, Dec. 27.

CASTLE CARY.—EXCAVATIONS.—The *Western Chronicle* says that the excavations at Castle Cary have been steadily pursued, and now the foundations of the keep of Cary Castle are sufficiently exposed to enable an accurate ground-plan to be made. This plan shows, beyond doubt, that the Castle was about 200 yards to the southwest of the position where it has been generally supposed to have stood, and where its site is marked on the latest ordnance map. The Castle is seen to be, not an ordinary "shell keep," but a strongly-built fortress of unusually large dimensions and thickness of walls, the outer wall being 15 ft. thick. The keep is nearly complete, but the walls of the inner and outer baileys are yet to be discovered.—*Builder*, Sept. 20, 1890.

CHESTER=DEVA.—EXCAVATIONS IN THE NORTH WALL (cf. vol. VI, p. 398).—During some repairs, made in Dec. 1890, to the north wall, to the west of Northgate, excavation was continued. It was soon apparent that, as was the case on the other side of Northgate, the wall was full of Roman remains, consisting of inscribed and sculptured monuments, portions of Roman buildings, etc. Seven inscribed stones (either whole or fragmentary) were at once unearthed, together with four pieces of sculpture. Two of these are particularly noteworthy. Hitherto, only one sepulchral monument of any *equites*, or Roman horse-soldiers, belonging to the twentieth legion, stationed at Deva (Chester), have been found; but here were two monuments to soldiers of this class, in one of which the soldier is shown on horseback: one of these has the inscription still perfect, whilst in the other it is at present missing.

ROMAN INSCRIPTIONS FOUND IN 1890.—1. Tombstone with inscription surmounted by fragment of a relief representing a horseman. D(is) M(anibus) | C. IVL(ius) SEVERVS | EQ(ues) LEG(ionis) XX V(aleriae) | v(ictricis) VIXIT AN(nos) | XXXX. 2. Relief of a horseman riding over a fallen enemy, well preserved; underneath an inscription, of which only the first line D. M. is left. 3. Tombstone with inscription surmounted by fragments of two figures, one certainly, the other probably, female. The whole is much broken. VOCONIAE C. VA[l(eriae?)] VICTOR | NIGRINA. Possibly C. Va[l].

Victor was husband of Voconia, but the inscription appears never to have been completed: certainly no more is visible. 4. Tombstone with inscription surmounted by the lower part of a "Funeral Banquet" relief. D(is) M(anibus) | RESTITAE V(ixit) | AN(nos) VII ET M | AR. . . (?) V(ixit) AN(nos) III. . . 5. Fragment of tombstone, with few fine letters. 6, 7. Fragments.

Besides these inscribed relics, some pieces of sculpture (all seemingly sepulchral) have been found, and some coping stones and other hewn work. All but two or three pieces are of red sandstone; the exceptions are of a whiter stone, resembling that used for the monument of M. Aurelius Nepos and his wife, now in the Grosvenor Museum. It appears, therefore, that the part of the north wall from which these stones come has contents very similar to the part examined some three years ago. The lettering of Nos. 1 and 4 seems to be later than that of the majority of the previous finds, but arguments based on lettering are at all times to be used with caution.—*Athenæum*, Dec. 13, 1890.

EXCAVATIONS IN 1891.—Since February, the work has gone on uninterruptedly. About 100ft. of the wall to the west of the northgate have been opened and thoroughly explored, without much disturbance of the face of the wall. Altogether some twenty-five inscriptions and funeral sculptures have been taken out, together with a number of other carved and worked stones. One centurial stone has been found, and this probably came from the first Roman wall of Chester, which would be pulled down when the area of the town was enlarged. One of the inscriptions commemorates an *optio*, or sub-centurion, who perished by shipwreck; another refers to the honorable discharge, *honesta missio*, of a soldier who was released from service; whilst a third was erected to a freedman by his former master.

ROMAN INSCRIPTIONS FOUND IN 1891.—Of the inscriptions found all but one are tombstones. 1. [*Dis Manibus . . .*] OPT[*i*]ONIS AD SPEM | ORDINIS CENTVRIA LVCILI | INGENVI QVI | NAVFRAGIO PERIT | S(itus) E(st). The phrase *ad spem ordinis* occurs several times in inscriptions, denoting that the dead man had been eligible for or expecting his promotion. In this case he was cut short by shipwreck, perhaps in the estuary of the Dee. 2. Inscription of one G. Valerius, badly mutilated. 4. D(is) M(anibus) S(acrum) | GABINIUS FE | LIX MILES L | EG(ionis) II AVG(ustæ) . . . | [?] VIX | SIT AN(n)IS | XXXX | H(eres) P(onendum) C(uravit). 5. Red sandstone figure of an *optio* with staff and "tickets" with the inscription: D(is) M(anibus) | [?] C(a)e | CILIVS AVIT | VS EMER(ita) AVG(usta) | OPTIO LEG. XX | V. V. ST(i)-P(endiorum) XV VIX(it) | AN(nos) XXXIV | H(eres) F(aciendum) C(uravit). Emerita is the modern Merida in Spain. 6. D(is) M(anibus) | CASSIVS SECVN | DVS MISSVS HO | NESTA MISSIONES | VIX(it) AN(nos) LXVX . . . | CO . . . 7. DIS MANIBVS | D. CAPIENI | VRBICI VOL | TINIA (tribu) VIENN(a) | SIG . . . STI | PEND(icrum) XXIV | ANNOR(um) XLIV | H(eres) F(aciendum) C(uravit).

9. D(is) M(anibus) | ETACONTIO | LIBERTO BENE | MERENTI C. ASV | RIVS
FORTI(s) PATR | ONVS EIVS POSVIT. 14. D(is) M(anibus) | C. IVL(ii) MARVL |
LINI B(ene)F(iciarii) TRIB | VNI VIXIT | ANNIS XXXXV | H(eres) F(acien-
dum) C(uravit).

Besides these inscriptions, several sculptures have been found, partly sepulchral figures, partly, perhaps, from some building. The details of these would, however, have little meaning without drawings.—F. HAVERFIELD, in *Athenæum*, April 25, May 16, 1891.

COLCHESTER.—At the Feb.-4 meeting of the Brit. Arch. Assoc., Mr. J. M. Ward exhibited a series of Roman earthenware vessels and fragments which have recently been found at Colchester outside the circuit of the Roman walls. Among these were some portions of vessels of Samian ware having patterns of great beauty, and the handle of an amphora inscribed with N and T conjoined and the name C ANTONI. . . Mr. Way pointed out that some of the patterns on the Samian ware were identical with several found in London.—*Athenæum*, Feb. 14, 1891.

DORE.—REMAINS OF A CISTERCIAN ABBEY.—Some curious finds were recently made when cleaning out two watercourses on the north of Abbey Dore in Herefordshire. The dormitories and domestic offices of the Cistercians who built it were on this side of the church, and doubtless many more singular relics would be recovered were a thorough investigation made. Nine old keys—probably of stables, granaries, and the like—were picked up. A keen-edged pointed dinner knife was also found, and three coins: one a silver groat of Elizabeth; the second a fine specimen of a copper sixpence of James II, dated 1689; and the third a copper halfpenny (?) bearing the legend NVMMORVM FAMVLVS, probably of William and Mary. A quantity of hewn stones and fragments, which had formed part of the conventual buildings, were also dug out. The keys and coins, together with the knife, are carefully preserved by the owner of the land, Capt. T. Freke Lewis, of Abbey Dore. The fine Cistercian church here is still used as the parish church, being the only Cistercian church so used in England.—*Athenæum*, Feb. 14, 1891.

EDINBURGH.—COLLECTIONS OF THE SOCIETY OF ANTIQUARIES.—The archaeological collections of the Society of Antiquaries of Scotland are being removed from the Mound, Edinburgh, to the large premises provided for them in the eastern portion of the Scottish National Portrait Gallery in Queen street.—*Academy*.

KENILWORTH.—EXCAVATION OF THE MONASTERY.—The *Coventry Herald* reports that these excavations (see vol. VI, p. 399) are now completed. The nave and north transept of the long-buried church have been cleared. Two stone figures, found during the excavation, have been built into a retaining

wall erected to preserve the adjoining cemetery. The south transept, chancel, and chapter-house are still unexcavated.—*Builder*.

LINCOLN.—ROMAN PORTICO.—An important discovery of Roman remains has been made at Lincoln in April, 1891. It will be remembered that in May, 1878, the bases and shattered shafts of three pillars of the Doric order, with a singular twin column of two inosculating shafts at the northern angle, were laid bare in digging the foundation of a new house in Bailgate, to the north of the central point of the Roman city. Nine years later, January, 1887, the pulling down of the houses adjacent to the south revealed the bases of three more columns on the same straight line. It was concluded that these were all that were to be found, and that they were the remains of a hexastyle portico, forming the front towards the street of a large building, of which the end wall (known by the name of "the Mint Wall") exists at the distance of 270ft. to the west, figured by Stukeley in the last century, and supposed by him, without any adequate evidence, to have been a Roman granary. In April, 1891, however, a discovery was made which alters all preconceived ideas as to the magnitude and character of this building. In laying down a new water-main in Bailgate, which runs on the line of the main street which intersected the Roman city from north to south, the workmen came upon the bases of four columns, ranging accurately with those already described, and identical with them in mouldings and general character. With the six previously discovered the number now amounts to ten, and there is no doubt that two more would be discovered in the interval yet unexcavated, between the last of the former range and the first of those now brought to light. This would give a colonnade of twelve columns. How many more still remain to be discovered to the south is uncertain, but from the configuration of the Roman city it would appear that there is room for one or two more before reaching the street running westwards from the central point, where the Roman milestone, now preserved in the Cathedral cloisters, was found some years back. This discovery proves that the building occupying the northwest angle of the northwest quarter of the city must have been of great size and stateliness. The façade must have extended for a length of at least 160 ft.—*Athenæum*, April 18, 1891; *cf. Academy*.

LONDON.—THE ROMAN WALL AND DITCH OF THE CITY.—During the excavations necessitated by the erection of the new Post Office buildings by the side of the ancient site of Aldersgate, one section of the ground taken close to Aldersgate Street showed in the ditch a raised bank which appeared to run under that street, and probably formed the base of a trestle-work supporting the timbers of a wooden bridge crossing the ditch at this place to the ancient gate. In the portion of the ditch revealed by the excavations nothing seems to have been found to clear up its date, but former

excavations near the same spot not only uncovered a portion of the ditch, but brought various Roman antiquities to light. It may, therefore, reasonably be presumed that the ditch recently rediscovered is Roman. Its greatest width is 74 ft., and a space of flat ground upwards of 10 ft. wide intervenes between it and the foot of the Roman wall, which wall, 8 ft. thick and built of rubble work with bonding courses of tile, has been clearly traced running east and west from Aldersgate Street to King Edward Street. The ditch was 14 ft. deep, and 35 ft. across its flat bottom; this, together with the sloping sides, was carefully puddled with a coating of clay 6 in. thick. The greater part of the length of the wall has been preserved and underpinned, so that it now forms the boundary on the north side of the new Post-Office buildings.—*Athenæum*, Feb. 7, 1891.

BRITISH MUSEUM.—*Additions to the Classical Antiquities.*—The Trustees have purchased the magnificent silver treasure of Chavurce which was offered for sale at Paris in June 1888 and is fully described and illustrated in the sale-catalogue whose descriptions are partly based on a study by Thédenat and Héron de Villefosse in the *Gazette Archéologique*, 1885, pp. 111, 256, 317. The treasure was discovered in 1883 in a field near Montcornet (Aisne) in ploughing, and from coins found on the spot and internal evidence is to be dated from the second century. It consists of thirty pieces of silver and six of bronze plated with silver, comprising an almost complete table service, *ministerium*: there are also silver statuettes of Fortuna and of a squatting Arab slave. Especially remarkable are a silver plate with Hermes between a cock and a ram in relief, and a large silver situla with floral ornament around the mouth. The workmanship is throughout of great beauty.

Numismatic acquisitions.—According to a paper by Mr. W. Wroth in the *Numismatic Chronicle*, the British Museum acquired about 350 Greek coins in 1890—12 of them of gold and electrum and 65 of them of silver. Notable among them are a distater of Thourion, a tetradrachm of Gela, a didrachm of Sybrita (Krete), a stater of Lampsakos, and a unique electrum stater of Mytilene. It also obtained 7 archaic coins from Egypt.—*Athenæum*, Feb. 14, 1891.

Greek gem.—The British Museum has recently acquired a most interesting gem, a greyish-blue chalcedony representing Hercules with one foot on the Nemean lion, which he has just conquered, and stretching out his hands to take a draught from a vase which the nymph Nemea has brought to him, and holds in both her hands. Above the group hovers a small Victory. The composition is, as Mr. Murray has remarked, that of a metope, and thus the gem may be of use in restoring the metope of this subject which came to the Louvre from Olympia, while some fragments since found are at Berlin, still, however, leaving the design imperfect.—*Athenæum*, Dec. 6.

A LIFE OF MICHELANGELO.—J. A. Symonds has undertaken a new literary work in the shape of a life of Michael Angelo. The work is to be on a considerable scale, both as to size and profusion of illustrations, and will, of course, embody the result of the latest researches on the biography and artistic labors of the great master.—*Athenæum*, Feb. 14, 1891.

HEBREW MSS. FOR THE MONTEFIORE COLLEGE AT RAMSGATE.—Some months ago we invited the attention of librarians to a collection of 400 Hebrew mss. which the owner intended to dispose of. We are glad to state now that the Trustees of the Montefiore College at Ramsgate have bought the collection, which contains many unique things—for instance, the annotations on Abraham-ibn-Ezra's commentary on the Pentateuch by Leon Mosconi, a Macedonian. These annotations are important for the history of Macedonia in the fourteenth century, and besides Leon quotes a number of works that are now lost. Hebrew liturgiology will be enriched by some unique rituals which some of these mss. contain, more especially from Provence. Other mss. are indispensable for the history of the Jews in Italy from the fourteenth century to the seventeenth. The library of the Montefiore College will possess now—adding the purchase of the Zunz Library, made by the principal, the Rev. Dr. Gaster, and some mss. coming from Yemen, with other mss. formerly acquired—more than five hundred Hebrew mss., and will thus take an important place amongst the great libraries.—*Athenæum*, May 2.

NORTHUMBERLAND.—PREHISTORIC CEMETERIES.—The last part of *Archæologia Aeliana*, published by the Society of Antiquaries of Newcastle-upon-Tyne, contains two illustrated papers upon recent excavations of prehistoric burial-places on the moors of Northumberland. In both, were found urns of the familiar Romano-British type, which are here figured in excellent photographic plates.—*Academy*, Oct. 4, 1890.

NORTH WALES.—EXCAVATIONS AT VALLE CRUCIS ABBEY.—An interesting archæological discovery is reported from the Vale of Llangollen, where the Vicar of Trevor is conducting a series of excavations at Valle Crucis Abbey. While excavating along the north of the ruin, was discovered the tombstone of a Knight-Templar (bearing a clear impression of the knight's sword sculptured at the base) beneath which were a few decayed bones. In completing the excavations along the west front of the abbey, the base of a spiral staircase was uncovered. The discovery of seven pieces of molten lead and iron and charred wood and stone demonstrated that the original abbey was destroyed by fire; and it is now believed that the momastery was suppressed by Henry VIII during its reconstruction.—*Builder*, Oct. 25, 1890.

PEMBROKESHIRE.—VANDALISM.—"Last Tuesday I visited the magnificent Cromlech of Longhouse in the parish of Llanrian, between St. David's and Fishguard, on the western coast of Pembrokeshire. The immense

capstone still rests on four upright stones, two others stand *in situ*, and the remaining one, which has fallen, lies hard by, partly covered with earth. I found a laborer, engaged, by the orders of his master, Mr. Andrew Griffith of the neighboring farm of Longhouse, in digging up and removing a number of large stones, which may have originally formed a part of a wall of protection, and which were lying buried beneath the side of the Cromlech next the sea. He informed me that his master was contemplating the overthrow of the entire Cromlech, in order to make a bank across the field behind. The farm of Longhouse formed part of the ancient endowment of the Bishopric of St. David's, and has only recently been sold by the Ecclesiastical Commissioners to Mr. Griffith. So noble a monument of antiquity as the Cromlech in question, it may be hoped, may yet be saved from destruction by the timely interposition of General Pitt-Rivers."—G. J. CHESTER, in *Academy*, Sept. 13, 1890.

SILCHESTER.—EXCAVATIONS IN 1890.—The following is a summary of the results obtained during 1890 in the comprehensive excavation of the site of Silchester by the Society of Antiquaries. Hitherto, nothing was known of the great western gate of the city except its site; but the present excavations have disclosed most interesting remains of this gate, under which passed the traffic along the main road through the Roman city. The roadway at the west gate was spanned by two arches. Among the massive fragments of the masonry uncovered is the impost of the gate, from which two arches sprang; and the mouldings on one side may be noted, cut away in order to allow the doors to shut against it. There are found to be two guard-rooms on each side of the gate, those on the south being most perfect. The wall here has a thickness of twelve feet, which decreases as it rises from the ground level; and it is backed by a great mound of earth. One point for investigation is whether or not this mound is of earlier Celtic origin. A paving of flints forms apparently a pathway to the top of the mound. At the west gate a fragment of a fine Corinthian capital has been found. As it has no connection with the structure, it was apparently brought there for some purpose during the occupation of the city. The remains of the west gate are admirable specimens of masonry, large blocks of oolite and other stone having been employed. Among the objects found on the site is a large strip of iron pierced with nail holes, which evidently bound the bottom of a door of the gate and furnishes an idea of its massive thickness. A portion of an iron pivot has also been unearthed. The *insula* which is being dealt with is in proximity to the museum. A house has been excavated at the northwest corner, the museum, in fact, standing on a corner of it. Traces have been found of another large house at the northeast corner. Between the two houses there is a considerable area of open ground. The explorers are led to conjecture that in each square there may have been a

certain number of houses with much open ground, consisting of courtyards and gardens. From its size and from the remains, it is considered that the house excavated was that of one of the wealthier inhabitants of the city. During the excavations, and principally at the *insula*, a large number of objects of antiquity have been unearthed. These have all been carefully labelled and classified, and occupy shelves in the temporary office.—*Academy*, Sept. 6, 1890.

We quote the following from the *Times*: "A discovery of the greatest interest has just rewarded Mr. St. John Hope and his fellow explorers at Silchester. In one of the houses, the foundations of which have been laid bare, the excavators came across a dry well, which, on being explored, proved quite a little museum of antiquities. Some fifteen feet down the diggers found an urn-shaped pottery vase, about a foot high, quite intact, and protected by lumps of chalk built around it. The vase, which probably contained originally some precious substance, was empty. Above it were deposited a great number of iron implements, most of which were in a wonderful state of preservation. They seem to have been the tools of a carpenter and a coppersmith or silversmith, with some miscellaneous objects of blacksmith's work thrown in. The principal specimen is a carpenter's plane of quite modern type, three or four axes, retaining their fine cutting edges still serviceable, a number of chisels and gouges of all shapes and sizes, hammers, adzes, saws, files, *etc.* In the smith's department may be specified a brazier for burning charcoal, quite complete, two or three anvils of different sizes and shapes, a fine pair of tongs adapted for lifting crucibles, a tripod candelabrum lamp, and several other curious objects the precise uses of which have not yet been determined. In addition, there are several large bars of iron, a couple of ploughshares, and a broken sword. Probably more will be found deeper down in the well."—*Academy*, Oct. 4, 1890.

The first report of the Executive Committee of the Silchester Excavation Fund gives the following facts: The excavations began on Monday, June 23rd, on a small portion of the *insula* north of the forum. The exact boundaries of the *insula* were ascertained by trenching, and considerable sections of what seemed boundary walls were laid bare, as well as traces of buildings to the northeast; but further operations were suspended till after the harvest. Next the west gate, which had previously been unexplored, was laid bare, and the north and south gates, already partially excavated in 1872, were laid open, and also a portion of the inner face of the city wall. After harvest the examination of the *insula* was recommenced, and a large house, which had been ornamented with mosaic floors, its walls decorated with color, and its rooms heated with hypocausts, was laid bare. Being near the surface it had suffered from repeated plough-

ing. That part of the *insula* lying south of the highway was outlined, and the street bounding it on that side discovered. North of the highway a series of refuse pits were come upon. In one a perfect bronze scale-beam and a number of iron tools—chisels, axes, hammers, files, anvils, *etc.*—were found. A well was also discovered lined with oak boarding. The basilica has been re-examined. The remains of what appear to be two temples were found near the parish church, which stands close to the site of the east gate. —*Anthænæum*, Dec. 6, 1890.

WINSFORD HILL (Exmoor).—THE ANCIENT INSCRIBED STONE.—"In the *Academy* of September 10, 1890, Professor Rhys gave an account of this stone, with its inscription: CARĀACI | EPVS. He conjectured that the initial letter of the second word, which had been broken away, was N, and accordingly interpreted the legend *Carataci nepus* (*i. e.* "kinsman of Caratacus").

I have just been informed that the missing fragment was found and preserved by the Rev. J. J. Coleman, of Dulverton, and that it bears the character N, evidently a misshapen N. Prof. Rhys is therefore right in his interpretation; and the theory of those who wished to make "episcopus" out of *epus* falls to the ground.—J. LL. W. PAGE, in *Academy*, Feb. 14.

SPANISH AMERICA.

NAMES OF METALS.—M. le comte de Charency presented at a meeting of the *Acad. des Inscriptions* (May 2, 1890) some remarks on the names of metals among the ancient peoples of Spanish America. Since about the beginning of our era they knew how to work copper, gold, silver, and bronze, but were ignorant of the use of iron. It has been asserted that the Peruvians possessed a process, now lost, for giving to copper the hardness of steel, but this seems to be an unfounded tradition. The comparison of the Mexican names of metals with those of Chiapa and Yucatan shows among the latter a Nahuatl influence over the progress of metallic industry. On the contrary, this art has a far more original development among their neighbors of Guatemala and Soconusco.—*Revue Crit.*, 1890, I, p. 380.

A. L. FROTHINGHAM, JR.

SUMMARIES OF PERIODICALS.

ΕΦΗΜΕΡΙΞ ΑΡΧΑΙΟΛΟΓΙΚΗ. JOURNAL OF THE ARCHÆOLOGICAL SOCIETY IN ATHENS. 1890. No. 4.—A. N. SKIAS, *Epigraphical Studies. The Gortynian Tables of the Laws*. New renderings are proposed and former renderings and interpretations discussed for the following passages: I. 12, II. 16, III. 9, III. 24, IV. 34, V. 1, V. 22, V. 25, VI. 13, VII. 23, VIII. 27, IX. 24-40, X. 48-XI. 6, XI. 46.—*Smaller Inscriptions* (*Mus. Ital.*, II, pp. 593-664). Comparetti's readings and interpretations are discussed and corrected in A. V, A. VI, B. II, C. I, C. II, and the fragments 1 and 2.—*Inscriptions from the Pythion* (*Mus. Ital.*, II, pp. 181-252). Comparetti's reading of 81, V. 5 is corrected. Professor Milani assigns the building in which the tables of the laws were originally inscribed to about the end of the fifth century B. C. Kirchhoff assigns the inscription itself to the fifth century. Comparetti assigns the inscriptions from the Pythion to the seventh, the tables of the laws to the sixth century. This last view is refuted. The λέβητες and τρίποδες mentioned in the inscriptions from the Pythion are explained as coins.—A. WILHELM, *Decrees from Eretria*. Two decrees are published. Both are inscribed upon the same broken stele of Eretrian marble. The first is a decree of the senate in honor of Hegelochos the Tarentine for having helped to free the city. The characters of the inscription point to the end of the fifth century B. C. Hegelochos was probably commander of the Tarentine ships mentioned by Thoukydides VIII. 91.2, and doubtless aided the Eretrians in their revolt from Athens 411 B. C. The second inscription in honor of Herakleitos a Tarentine is somewhat later, but still earlier than any known inscription of Eretria except the one for Hegelochos. These inscriptions show a number of dialectic forms.—*The fragment of an Attic decree* CIA, II, No. 492= Έφ. Ἀρχ., 1840, No. 378, Rhangabé, *Antiq. hell.* II, p. 532 is republished with new restorations. It belongs to the year 333/2 B. C. The Eunikos mentioned Έφ. Ἀρχ., 1891, p. 151, No. 2, was already known (CIA, II, 975) as archon B. C. 169/8. The Xenokrates of that inscription is probably the one mentioned in the inscription Έφ. Ἀρχ., 1890, p. 125, ff. v. 30. The archon Pelops of that inscription belongs to the middle of the second century B. C.—D. PHILIOS, *Sculptured Works from Eleusis* (pls. 10, 11, 12, 13; supplementary plate; cut). *Plates 10, 11* represent a statue found in Eleusis. Both arms are almost entirely gone, but the right arm was evidently raised, the left lowered. The left leg is entirely missing, though the lower part

of a leg has been found which probably belongs to this figure. The right leg below the knee is wanting. The type is that of the London figure (Brunn, *Denkmäler*, 46) and that in the Baracco collection in Rome (Kekulé, *Idolino*, pl. iv. 2, 3). This represents, not a youth putting on a garland, but a boy scraping his brow probably with a strigil, and is regarded as a copy of the apoxyomenos of Polykleitos. *Plate 12* represents a copy of the group still in position in the western pediment of the Parthenon. The figures are both so mutilated as to be of no assistance toward the interpretation of the pediment figures. The copy belongs to early Roman times, and is not quite exact. *Plate 13* gives two fragmentary groups, each a woman with a child in her lap, probably copies of some of the figures of the Erechtheion.—I. SAKKELION, *Inscription from the island of Lepsia*. The inscription merely gives a date by mentioning the *stephanephoros* and the *phrourarchos*.—ST. A. KOUMANOUDES, *Inscriptions of Athens*. Three inscriptions. The first, found near the "tower of the winds," is the beginning of a decree. The archon is Theophilos, B. C. 251/50. The second, from the same place, is a fragment of a report of the *πρωταῖ* in the archonship of Anaxikrates, B. C. 307/6. The third, found somewhere in Athens, is a fragment (31 broken lines) of a decree in honor of some one who had been at great expense for the Panathenaia and other public services. The date appears to be the fourth or third century B. C.—*Sarcophagus from Patras* (pl. 9). This sculptured sarcophagus (2.10 m. long, 0.96 wide, 0.95 high), found at Patras, was bought by the archaeological society, and placed in the Central Museum. The article to which the plate belongs follows in the next number (see below).

1891. Nos. 1-4.—CHR. TSOUNTAS, *From Mykenai* (pls. 1, 2, 3; three cuts). *Plate 1* gives plan, front, and details of a tomb excavated at Mykenai in 1890. The ceiling slopes in two directions as if formed by a gable-roof, and the gables also slope inward. The door-posts and lintels are adorned with rosettes in a pattern of waves bordered by straight lines. The colors are black, white, and three shades of red. The gable-roof was doubtless the common roof of the "Mycenean" race and epoch, the flat roofs of the rulers' palaces being adopted from the East. The houses at Mykenai, like some of those in Athens, were entered by external stairs leading to the second story. *Plate 2* represents a part of a silver vessel with relief, a statuette similar to that published by Schliemann in *Mycènes* (p. 64, fig. 12), and *Tiryns* (p. 187, fig. 97), which is here republished after cleansing, a rude bronze animal, and a sword. The relief on the silver fragment represents the defence of a walled town by slingers, bowmen, and spearmen, of whom the last are clothed, most of the others naked. On the walls are women. The similar scene described by Hesiod (*Shield of Herakles*, 237 ff.) is discussed. The statuettes probably held spears in their right hands, shields in their

left, and may represent Zeus brandishing his thunderbolt and hidden by the ægis or the cloud. *Plate 3* represents a two-handled jug adorned with rings, a fragment of pottery upon which an armed man is painted, two fragments with Egyptian hieroglyphs, a fibula, and a utensil shaped like a blunt dagger. It is contended that the so-called Mycenaean civilization was really that of a Hellenic people. Egyptian influence is shown by the occurrence of the name of Amenophis III (1440–1400 B. C.) three times upon objects found at Mykenai; but the Hellenic character of the people is shown by comparison of "Mycenaean" objects with those acknowledged to be Hellenic, and by the similarity of the houses at Mykenai to those at Athens, and also by the fact that the inhabitants of Mykenai, like the early Greeks, ate oysters but not fish, which seems, judging from linguistic evidence, to have been true of many Indo-European races.—B. STAES, *Statues from Rhamnous* (pls. 4, 5, 6, 7; cut). Four statues are published. The first three were found in the older temple. One is a colossal draped female figure of marble. Both hands are wanting. The inscription states that Megakles, a victorious gymnasiarch and choregos in comedy, dedicated the figure to Themis. The statue is interpreted as Themis, and is ascribed to Alexandrian times. The artist was Chairestratos son of Chairedemos, a Rhamnusian. This statue stood in the sw. (*i. e.*, the rear left-hand) corner of the temple. The second figure stood next the first, and represents a draped female. The inscription states that Hierokles son of Hieropoios, Rhamnusian, dedicated to Themis and Nemesis (the statue of) his mother Aristonoe, daughter of Nikokrates a Rhamnusian, priestess of Nemesis. The work belongs to Roman times. Before the base of this statue was a grave containing lamps and coins of imperial Roman times. Possibly the grave of Aristonoe. The third statue stood next the above, and therefore in front of the door. It represents a half-draped boy. The work is ordinary, attributed to the fifth century B. C. It is dedicated "to the goddess who holds this *temenos*." Apparently, other votive statues stood beside this, completing a row across the back of the temple. Apparently, there was no "cultus-statue." It is maintained that this temple was sacred to Nemesis, not to Themis. The fourth statue published was found with parts of three similar ones outside of the *temenos* of the temples by the road leading to the harbor. It represents a youthful, effeminate, draped figure. The sculpture extends only to the knees. From there down the marble is a square block like a "Hermes" or "term." The figure is interpreted as Hermes. The inscription on the pedestal gives a fragmentary dedication by gymnasiarchoi and *λαμπάδι νικήσαντες* and the names of 46 *λαμπαδηφόροι*. Other dedicatory inscriptions are given.—B. STAES, *Fragments of a Pheidonian Relief* (pls. 8, 9). Three female heads, a fragment of a fourth head, a horse's head, and six fragments of draped human figures are published.

These and other inconsiderable fragments of the same relief were found at Rhamnous. The figures, if complete, would be about 30 ins. high. The marble is not Attic, perhaps Parian. The fragments belong to the relief on base of the statue of Nemesis ascribed to Pheidias and to Agorakritos. The writer believes that Agorakritos made the statue and the relief under the supervision of Pheidias. The arrangement of the relief (Paus., I. 33.7) is discussed. The three female heads are those of Nemesis, Leda, and Helena.—B. I. LEONARDOS, *Inscriptions of the Amphiareion* (contin.). Twenty-seven inscriptions (Nos. 34–60). No. 34 contains provisions for insuring a proper supply of water for the baths by means of a stone conduit. No. 35 provides for borrowing money to build walls, and for honoring with proxeny, *etc.* those who lend the city a talent or more at 10 per cent. No. 36 is a decree of the Athenian people conferring a golden crown upon Amphiaraos. No. 60 is dedicatory, and contains the new name Ἀμεινονίκη. The rest are decrees of proxeny, *etc.*, conferred for various specified reasons, in most cases by the Oropians, in a few cases by the Bœotian League.—R. WEISSHÄUPL, *Representation of a drunken old woman* (pl. 10). A vase, said by the seller to be from Skyros, is published. It has the shape of a drunken old woman seated, holding a bowl in her lap. An inscription states that a drunken old woman is represented. A similar vase from Tanagra is described. Other similar representations are discussed, especially three statues, in Rome, Munich, and Dresden. These three are or Roman workmanship, and probably came from Rome. Pliny (*NH*, xxxvi. 33) mentions an *anus ebria* by Myron. Besides the famous worker of bronze, two other Myrons are known, one of the early third century B. C., the other of the latter part of that century (Löwy, *Künstlerinschr.*, 154), a Theban, who worked at Pergamon. The drunken old woman may have been his work, wrongly ascribed by Pliny to the first Myron. The vase (probably of the second century B. C.) and the Roman marbles may be more or less free copies of this work.—TH. SOPHOULES, *Archæological Studies*. I. *The Nike of Archermos* (pls. 11, 12, 13, 14, 15; supplementary pl.). The only early sculptures from the islands of the Aegean are the "Hera" of Samos and similar works. With these the Nike of Archermos has no connection. It shows close relationship to early Attic works, especially works in poros stone. In illustration of this fact, five torsos, two heads, and one almost complete figure of archaic Attic work are published, besides sketches of the eyes and the shoulders of the Nike and several Attic works. Plate 11=J. H. S., 1888, p. 121, pl. 15=Lepsius, *Marmorstudien*, p. 69. The other plates are new publications. The relation of the Nike to Attic works is traced in the folds of the garments, the shape of the shoulders, the hair, and especially the eyes, which are carefully discussed. Other features also tend to prove the same close relation of the Nike to Attic work. Though

the inscribed base from Delos has been shown by Sauer not to belong to the Nike, the figure may still properly be connected with Archermos, though the tradition that he invented the flying Nike is incorrect. There is no evidence that Mikkiades was an artist. Archermos spent his life for the most part away from Chios. His art is Attic. His sons returned to Chios and introduced Attic art there.—K. D. MYLONAS, *Marble Sarcophagus with representation in relief* (pl. 9 of 1890; see above). The chief long side represents the Calydonian boar-hunt. The work is lively and easy, of Roman times. One short side continues this scene, being adorned with figures of two men and a dog; the other end has a bull borne down by a griffin. At the back are two lions facing each other with their forepaws on a jar.—**MISCELLANIES.** CHR. TSOUNTAS, *Bee-hive Tomb* (τάφος θολωτός) in *Kampos*. The tomb was discovered in 1886, and has been excavated by Tsountas for the archæological society. The work was finished in June 1891. Kampos lies SE. from Kalamata at the sw. foot of Taygetos. The tomb was built of hewn stones. The top fell in in ancient times, and the tomb was plundered. The most important objects now found are two leaden images, one of a man girt about his loins like the men on the gold cups from Vaphio, the other of a woman in a long garment.—A. SKIAS, *Tisyros, a Cretan City*. Cretan coins bearing the inscription *Τίσυροι* may belong to a town Tisyros referred to in *Schol. ad Theocritum III.* 2 (Ahrens). Svoronos (*Numismat. Chronicle*, VII, p. 126 f.) may, however, be right in thinking the inscription gives an epithet of the Gortynians.

HAROLD N. FLOWER.

JAHRBUCH D. K. DEUTSCHEN ARCHÄOLOGISCHEN INSTITUTS.
Vol. VI. No. 2, 1891.—P. WOLTERS, *Tyro* (pl. 2). A Tanagra terracotta in Athens, described by Koepp, *Athen. Mitth.* (x, p. 173), represents a woman seated on a rock looking at two infants in a cradle floating in water. Tyro, according to the interpretation here given, has exposed her children Neleus and Pelias on the waters of the Enipeus. This is not the form of the legend given in the *Odyssey* (xi. 235), but that adopted by Sophokles.—G. TREU, *The latest attempts at arrangement of the Eastern Pediment at Olympia* (13 cuts). This number of the *Jahrbuch* is in great part devoted to the pediments at Olympia, pending the publication of the volume on the sculptures of Olympia. In this article, Treu attacks Sauer's arguments (*Jahrb.*, VI, p. 9, ff.), for an arrangement similar to that proposed by Six (*Journ. Hell. Studies*, x, p. 98, ff.), and maintains his own previous position. He shows that the size and shape of the pediment make it certain that Pelops and Oinomaos stood next to Zeus, and that there was no altar. The horses on both sides were completely harnessed and stood almost abreast of each other. Some remarks are made concerning other figures. In an appendix, Sauer briefly defends some of his previous conclusions.—A. FURTWÄNGLER, *The*

Eastern Pediment at Olympia (cut). The arrangement here proposed is identical with that proposed by Treu (and Studniczka) (*Jahrb.*, iv, pls. 7, 8, 1) except that Treu's *L* and *O* change places, the girl *O* being regarded as a servant of Sterope. The horses are completely harnessed, and held by the reins from behind. The two bearded seated men are restored with staves (so also by Treu in his article in this number). The bald-headed, thoughtful-looking one is called Myrtilos. It is suggested that the other sees a sign in the flight of birds. The corner figures are called interested spectators, not Kladeos and Alpheios. So, in the western pediment, the corner figures are said to be not nymphs but maidservants.—B. SAUER, *Additional Remarks on the Western Pediment at Olympia* (5 cuts). Several minor changes in some of the groups are shown to be necessary. The central figure is restored with an arrow in the right hand and a bow in the left, the bow being pressed upon the ground so as to bend it preparatory to fastening the string at the upper end. The figure thus restored is called Peirithoös.—G. TREU, *The Olympic Pediments again*. This is a reply to the articles of Furtwängler and Sauer in this number. None of their suggestions are accepted, but they are discussed in detail.—A. FURTWÄNGLER, *The Heads of the Greek Braziers*. The braziers published and discussed by Conze (*Jahrb.*, 1890, p. 118, ff.) are frequently adorned with heads in relief. One type, at least, of these is recognized by Conze as representing "Hephaistic Demons." Furtwängler gives them their name—*Kyklops*—and shows how these demons of the smithy are related not only to Hephaistos but also to the Satyrs. A group of vases (Robert, *Archäol. Märchen*, p. 198 ff.) with representations of a large female head rising from the earth, while satyrs with hammers leap about, is discussed. This represents Gaia, whom the smith-spirits call up in the spring to new activity by their hammering, an interpretation derived from the Eros-worship of the Attic Phlya. The myth of Hera freed from fetters by Hephaistos is a parallel to this. The pelike in St. Petersburg (Robert, *Arch. Märchen*, pl. 2, p. 180, ff. = *Compte Rendu*, 1859, pl. 1, Gerhard, *Ges. ak. Ath.*, pl. 76) is interpreted as Gaia bringing Iakchos from the lower world. The spirits of the smithy, Hephaistos, *Kyklops*, Lemnian Kabeiroi, *Daktyloi*, *Telchines*, with Prometheus and Daidalos, are all kindred.—ARCHÄOLOGISCHER ANZEIGER (supplement to the *Jahrbuch*). ANNUAL REPORT OF THE ACTIVITY OF THE IMPERIAL GERMAN ARCHÆOLOGICAL INSTITUTE.—MEETING OF PHILOLOGISTS. At the 41st meeting of German philologists and schoolmen in Munich, May 20–23, various addresses upon archæological subjects were delivered. Measures for giving the teachers and pupils of the gymnasia archæological advantages were discussed.—REPORTS OF MEETINGS OF THE ARCHÆOLOGICAL SOCIETY AT BERLIN. 1891. MARCH. A joint meeting of the archæological society and other associations took place in the city-hall March 1,

in honor of the late Dr. Schliemann. At the regular meeting (March 3), *Diels* spoke of the new fragments of Euripides' *Antiope* and Fabricius' map of Thebes; *B. Graef*, on the Metope newly found at Selinous (*Not. d. Scavi*, 1890, April, p. 130), and photographs of other metopes from Selinous; *O. Rossbach*, on three plastic portraits of Hellenistic times (Comparetti e de Petra, *Villa Ercolanese dei Pisoni*, pl. xx. 5; *Antike Denkmäler*, I, pl. v; *Ancient Marbles in the British Museum*, x, pl. xxxii); *Curtius*, on recent additions to our knowledge of the history of Athens; *Furtwängler*, on Greek vases in the collection of Herrn von Branteghem in Brussels, on a marble statue of a girl belonging to Mr. Jacobsen in Copenhagen, on the interpretation of the figures of the western pediment of the Parthenon. The accessory figures are interpreted as Kekrops, Erechtheus, Oreithyia, Butes, Buzyges, etc., persons closely connected with the Akropolis.—APRIL. *Adler*, on the architectural results of the excavations at Olympia; *Belger*, on the circle of graves within the acropolis at Mykenai; *Winnefield*, on the villa of Hadrian at Tivoli.—MAY. *Conze*, showed photograph of a mummy with painted portrait-head in the Graef collection in Vienna (cut); *Ohnefalsch-Richter*, on his excavations in Kypros, especially the discoveries at Tamassos; *Oehler*, on Hannibal's siege of Saguntum.—COLLECTION OF PHOTOGRAPHS FOR SALE BY THE INSTITUTE IN ATHENS. Titles of about a thousand photographs are given. Orders are to be sent to Dr. W. Dörpfeld, first secretary of the institute in Athens.—NEWS OF THE INSTITUTE.—NOTES ON THE PUBLICATIONS OF THE INSTITUTE. *K. Schumacher* maintains that the fragments in Karlsruhe and Clarke's drawing belong to a representation of the lower world (cf. *Jahrb.* IV, p. 227 f.).—*M. Fränkel* publishes a statement of Usener regarding the canon of orators, which he ascribes to Didymos or some one of his somewhat older contemporaries.—*A. Furtwängler* replies briefly to Treu's reply to his article on the eastern pediment at Olympia (see above).—BIBLIOGRAPHY.

No. 3.—A. MICHAELIS, *Roman sketch-books of Marten van Heemskerck and other northern artists of the XVI century.* I (9 cuts). Two sketch-books of Marten van Heemskerck now in the Berlin Kupferstich-cabinet are described. The first was in Mariette's possession in the last century, and passed from the Destailleur collection to the Berlin cabinet. The second belonged toward the close of the last century to Anne Seymour Damer, who may have inherited it from Horace Walpole. Vol. I contains 78 leaves, vol. II, 94 leaves. Heemskerck was in Rome 1532–36. The sketch-books contain drawings (chiefly pen and ink sketches) of gardens and halls with collections of ancient statuary, also of modern buildings, and views of Rome. Each drawing is described in detail. Vol. I seems to have lost 13 leaves at the beginning. In the *Paradigmata graphices variorum Artificum* by Joh. Episcopius (Jan Bisschop), Hague

1671, plates 36 and 37 are from drawings by Heemskerck. These are here described. Two figures are from vol. I, the remaining 11 may be from the lost leaves of the same book. In the Berlin Kupferstich cabinet No. 2783 is a pen drawing signed M. Heemskerck, and dated 1555, representing the court of the Casa Sassi (here reproduced). This drawing was engraved by Coornhaert. The engravings in the cod. Pighianus, fol. 213-220, are not from Heemskerck's sketch-books, but are fancy sketches of the eight wonders of the world.—R. ENGELMANN, *The Homeric Pempobolon* (3 cuts). Helbig (*Das Homerische Epos*, p. 353) explained as the pempobolon an instrument with five or more crooked hooks, specimens of which are not rare in Italian museums. This instrument is shown to be the κρέαγμα, also called λύκος, ἀρπάγη, and ἐξαυστήρ. It was used, not to hold meat over the fire while roasting, but to take pieces of meat from the boiling-pot, and also to fish up vessels that had fallen into the well.—R. FÖRSTER, *Laocoön Monuments and Inscriptions* (pl. 3; 16 cuts). This article is supplementary to the author's essay in *Verhandlungen der vierzigsten Versammlung deutscher philologen in Görlitz*, Leipzig, 1890, p. 74 and 298 ff. "Aside from the Vatican group, the Pompeian wall-painting, and the Vatican miniature, only the contorniates offer indubitable and certainly antique representations of the Laocoön myth." The contorniates are of two types, the first represented by a medal of Vespasian in Naples, and one of Nero in the possession of J. P. Six in Amsterdam, the second by a medal of Nero in Vienna (all here published). In the first type Laocoön has his arms stretched out horizontally, in the second they are bent, and his position is more erect in the second than in the first. The first type has two serpents, and, as the second type is dependent upon the first, it probably has two serpents, though the details of the group are not all distinguishable on the medal. The Wittmer relief in Rome and the Madrid relief (both here published) are derived from a common original which is ascribed to the early XVII rather than to the XVI century. The bronze (here published) formerly in the Van Smet collection in Amsterdam is also modern. The drawing by Filippino Lippi (No. 169, now in the Uffizi, brought from the Pitti palace in 1709, here published) was made before the discovery of the Vatican group, and is inspired by Virgil's description, not by any antique representation. Two terracotta fragments from Tarsos, now in the Louvre, representing each a human leg about which a serpent is twined, may belong to a representation of the Laocoön myth, perhaps a free reproduction of the Vatican group (the fragments are here published). The so-called head of Laocoön in the *Museo Civico* in Bologna (here pl. 3) does not represent Laocoön, but is more likely to have been part of a *gigantomachia*. A black-figured *lekkythos* represents, not Laocoön, but a sepulchral *genre scene* (see below). The

seven inscriptions of Athanodoros, son of Agesandros, all of which have been previously published, are here given in facsimile. The *Isis Athenodoria* mentioned in the *Curiosum* and the *Notitia Regionum XIV* as being in the XII region was probably a work of the Rhodian Athenodoros. Possibly the colossal marble foot found in 1872, near S. Cesario on the Via Appia, may have belonged, as Lanciani (*Bull. d. Comm. arch.*, I, p. 33 f.) has suggested, to the Isis.—A. BRUECKNER, *The Lekythos Plate 4* (pl. 4). The black-figured *lekythos* mentioned by Förster (see above) is published. It is now in private hands in Athens, and was found in Tanagra or in Eretria. A white mound occupies the left part of the picture. Before the mound is an owl on a twig, both violet color. Eight or nine letters are inscribed in violet color on the white background of the mound. From behind the mound two great snakes come forth, and a youth with something in his hand runs away to the right. The inscription is not as yet explained, and the representation is fragmentary. The mound is doubtless a *τύμβος*, like one discovered at Vurva and one in Athens on the Peiraicus Street (*Δελπίον*, 1891, p. 33). The scene here represented may belong to the myth of Glaukos and Polyeidon (Aelian, *Περὶ Ζῴων*, v. 2).—ARCHÄOLOGISCHER ANZEIGER. ACQUISITIONS OF THE COLLECTIONS OF ANTIQUITIES IN GERMANY. I. *Berlin* (44 cuts). The collection of Greek and Roman sculptures and casts has acquired 3 originals and 34 casts; the antiquarium, 22 vases of various styles, about 20 terracottas, among them two small reliefs reproducing groups from the balustrade of the temple of Athena Nike, 11 bronzes besides a number of ornaments found in a Theban grave and 4 fibulae from different places, 10 engraved stones (gems), 13 gold and silver ornaments, including some interesting Cyprian pressed work, 5 limestone sculptures from Kypros, an ivory statuette of archaic Etrusco-Grecian workmanship, a glass goblet, a number of lead tablets from Attika with curses inscribed on them, the contents of six graves at Katydata-Linu in Kypros, and several hundred vases, bronzes, and other objects from Tamassos in Kypros. These last are to be published.—THE WAGNERSCHKE KUNSTINSTITUT OF THE WÜRZBURG UNIVERSITY. The new arrangement of the museum is described.—LIST OF CASTS for Sale in the Casting-house of the Collection of Sculptures in Dresden. The list here given contains 64 numbers, and includes only antiques.—ACQUISITIONS of the British Museum in the Year 1890, from A. S. Murray's report to parliament, June 1891. The process of arrangement and cataloguing progresses. "Section II, Part III of the *Ancient Greek Inscriptions in the British Museum* and a new edition of the *General Guide* have been issued. Progress has been made with a *Hand-book* to, and a *Catalogue* of, the Vases, and a *Catalogue* of Sculpture." The museum has acquired numerous antiques of all classes, pottery being very fully represented. The Carlisle collection,

chiefly of engraved gems, alone contains more than 160 numbers.—**MUSEUM OF CASTS IN NEW YORK.** It is proposed to establish a great museum of casts in connection with the Metropolitan Museum.—**ROGERS COLLECTION.** Three additional vases formerly in the Rogers collection, now in the possession of Mrs. W. Scharpe (1 Highbury Terrace) are described.—**REPORTS OF MEETINGS OF THE ARCHÆOLOGICAL SOCIETY IN BERLIN.** 1891. **JUNE.** A present from Prof. v. Brunn to the society of copies of a plate representing the female head in Munich (Glyptothek No. 89) was announced. *Lehmann*, on the scales found at Chiusi; *Brueckner*, on recent excavations in Athens; *Adler*, on a restoration of the Zeus of Pheidias at Olympia. June 10 the society met with the Orient-committee, the Anthropological and the Geographical Societies to receive the report of the excavations of the Hittite city of Sindjirli in Syria. The speakers were *v. Kaufmann*, *v. Luschan*, *Koldewey*, *Schrader*, *Sachan*, *Schöne*, and *Virchow*.—**JULY.** The plates from *Prof. v. Brunn* were presented. *Koepp*, on a number of recent publications, especially on the monument from Gjölbaski; *Bloch* and *Kalkmann*, on an athlete in the Uffizi (Dütschke, III, p. 35, No. 72); *Furtwängler*, on the extant copies of the Aphrodite of Knidos, on a head in the British Museum (*Anc. Marbles*, II, 23; Newton, *Guide to the Græco-Roman Sculptures*, No. 139), and on a bronze statuette of the cabinet de Janzé in the *Cabinet des Médailles* in Paris.—**NEWS OF THE INSTITUTE.**—**NOTES ON THE PUBLICATIONS OF THE INSTITUTE.**—**G. TREU** replies to some of Furtwängler's remarks in the last number of the *Anzeiger* concerning Treu's arrangement of the eastern pediment at Olympia.—**CORRECTIONS** and supplementary notes are given for plates 15, 16, 24, 29, and 31 of the supplementary number of the *Monumenti Inediti* published in the spring.—**BIBLIOGRAPHY.**

HAROLD N. FOWLER.

JOURNAL OF HELLENIC STUDIES. Vol. X. No. 1-2 (October), 1889.

—**A. S. MURRAY**, *Remains of Archaic Temple of Artemis at Ephesus* (pp. 1-10; pls. III, IV; 5 cuts). In 1874 Mr. Wood discovered several fragments of archaic sculpture built in part into the piers underneath the walls of the cella of the later temple of Artemis. Sir C. T. Newton (*Portfolio*, June, 1874) suggested that they might be the remains of a small *θηρικός* on the altar of Artemis Protothonia, with work by Rhoikos. But this artist is too early for sculpture of this kind. We have here fragments belonging to the cornice of the old temple, sculptured designs (perhaps a Greek and Centaur, the latter with human forelegs, may be recognized) between the lion-head spouts; in the later temple the corresponding designs were floral. In style, the work resembles that of the Harpy tomb, and may be assigned to about 550 B. C. The *columnae caelatae* of the later temple were copied in general idea from similar columns in the earlier temple: by the aid of

fragments of the older columns, base and necking, and in view of the general resemblance between the older and the later columns, a probable restoration of the columns of the older temple is proposed: on the lowest drum, just above the torus-moulding inscribed Βα[σιλεὺς] Κρ[όισος] ἀνέ[θηκε]ν (cf. Hicks, *G. Hist. Insc.*, No. 4), are archaic carved figures. This older temple was built by the aid of Kroisos, and Chersiphron was architect. Perhaps the sculptor was Bupalos.—H. F. TOZER, *The Greek-speaking Population of Southern Italy* (pp. 11–42). Twenty thousand people in Southern Italy—in two groups, one at the heel, the other at the toe—to-day speak Greek as their native tongue. Their language is not the modern survival of that of the colonies of Magna Græcia; the people are the descendants of Byzantine Greeks who migrated to Southern Italy not later than the eleventh century; these original colonies appear to have been reinforced at a later date. The writer reviews the literature of the subject, and makes general remarks on the two dialects, touching sounds, accents, inflections, vocabulary; he also gives specimens of proverbs and of songs (with translations): in the dirges there is distinctly a survival of pagan ideas and conceptions.—B. V. HEAD, *Apollon Hikesios* (pp. 43–45). Vaillant, Eckhel, and Akerman are wrong in reading ΑΠΟΛΛΩΝ ΕΜΒΑΚΙΟC ΕΦΕΚΙΩΝ on the reverse of an Ephesian coin of Antoninus Pius. The epithet should be ΙΚΕΚΙΟC (cf. Aisch. *Suppl.*, 341, 610; Soph., *Phil.*, 482), and was borne by Apollon in a temple at Ephesos probably consecrated by Antoninus Pius. Pieces bearing the legend ΠΕΙΟC ΕΦΕΚΙΩΝ (Eckhel, II. 516) are probably misread specimens of the coin here discussed.—E. L. HICKS, *Inscriptions from Casarea, Lydæ, Patara, Myra* (pp. 46–85; 5 cuts; 2 maps). Forty inscriptions, mainly short, collected by Mr. J. Theodore Bent: for the most part they are sepulchral or honorary, and with two or three exceptions (*No. 1* is dated 150 B. C.) are of Roman imperial times. The writer describes the site of Casarea and Lydæ in detail. *No. 5* is Carian. *No. 6* throws light on the family of Leontomenes, and on the internal affairs of Lydæ (perhaps about 70 B. C.). *Nos. 8–23* relate to the family of Diophantos of Lydæ, which flourished under the Caesars: at least 22 members of this family are named, and their pedigree is suggested. *No. 24* honors an eminent physician, Ameinias Aristoboulos, of Lydæ. *Nos. 25, 26* are in honor of Julius Quadratus and Mettius Modestus, legates at Lydæ, probably in A. D. 92 and 101, respectively. *No. 28*, from Patara, relates to Polyperchon (which read in Arrian, *Anab.*, II. 12), who was priest of Apollon, prytanis and secretary twice over, besides holding all these offices together in one year. Perhaps in this inscription there is a reference to Germanicus and Drusus. *No. 29* is in honor of Hadrian; *No. 30*, of Sabina, Hadrian's wife; *No. 31* is on the pedestal of three statues, of M. Aurelius, Faustina, and L.

Verus respectively. No. 33 is in honor of a victorious athlete (ἱερoneύκης). No. 34 is a dedication or ex-voto in honor of the deities that bring fair weather (Ἥλιος Ἀπόλλων), and that protect the sea from storm and the land from earthquakes (Ποσειδὼν Ἀσφάλειος, here Ἀσφαλής, and Ἐδραῖος). The epithet Ἐδραῖος as here applied to Poseidon is new, but cf. *ICor.*, xv. 58. No. 36 corrects Waddington-LeBas, No. 1265; No. 37, *CIG*, 4292, and No. 39, *CIG*, 4293. Nos. 35, 40 illustrate the custom of threatening fines, as well as invoking curses, upon persons who would infringe the rights of the grave (cf. Hirschfeld, *Königsb. Studien*, I, 1887.—FLORENCE McPHERSON, *Historical Notes on certain Modern Greek Folk-Songs* (pp. 86-9). Errors made by A. Passow (*Popularia Carmina Graeciae Recentioris* (Leipsic, 1869), in naming and classifying Nos. cxciv, cxcv, and cxcvi are pointed out and corrected. No. cxcv refers to the fall of Salonika (Thessalonika), 1430, while No. cxcvi to that of Constantinople. No. cxciv was produced in later times by a fusion of the other two. No. cxi should be dated 1831, not 1810, and No. ccxliii probably at least fifty years earlier than 1822-26, Passow's date. No. cclv should be dated 1822 (not 1825).—W. RIDGEWAY, *Metrological Notes*. III. *Had the People of Pre-historic Mycenae a Weight Standard?* (pp. 90-97). The writer's contention—set forth in *JHS*, viii, but there based only on literary evidence—that the Greeks had a weight-standard long before the introduction of coined money from Asia, the unit of which was the same as the Attic Euboic system (130-135 grains Troy = Homeric τάλαντον of gold = cow), appears to be sustained by Mycenaean finds. Certain rings (Schliemann, *Mycenae and Tiryns*, p. 354) of gold and silver weigh at the lowest 132 and 137, and at the highest 655 and 662 grains (the latter 5 times —πεμπάζειν—the former); other rings are graded to the same scale ($2 \times 132-137$; $3\frac{1}{2} \times 132-137$). This points to a weight-standard of which the unit was 132-137 gr.: if this view be correct it proves beyond question that the Greeks employed a weight-standard similar to the light Babylonian shekel and Euboic stater before they learned from the East the art of coining money.—IV. *How were the Primitive Weight Standards Fixed?* Metrologists, as a rule, hold that weight units could not have been arrived at empirically, and therefore seek their origin in the scientific astronomy of the Babylonians. The writer, who has demonstrated that in the oldest Greek unit of weight, the talent of gold in the Homeric poems, we have an amount of gold anciently accepted as representing the value of an ox or cow, aims to show how primitive man might empirically fix upon some such valuation, by appealing to analogies of customs in countries where systems of weight have not gained a foothold.—J. SIX, *The Composition of the Eastern Pediment of the Zeus Temple at Olympia and Alcamenes the Lemnian* (pp. 98-116; pl. vi; 3 cuts). The writer proposes a new arrange-

ment of the figures in the East Pediment of the Zeus Temple, duly criticising former suggestions (Curtius, Treu, Grüttner, Brunn, Flasch, Kekulé, Studniczka and others): viz. [the letters are Treu's—*cf.* Baumeister, *Denkm.* II, fig. 1272—but the names are, in part, Six's] beginning at the south, the spectator's left, *A* (Kladeos), *L* (?), *C* (not Myrtilos), a horse walking to right, with bronze chariot at his right, *D* (three standing horses), *B* (kneeling boy, with back and right thigh to the front), *I* (Oinomaos), *K* (Sterope, with left hand raised to her neck), a low small altar, *H* (Zeus), *F* (Hippodameia, with left hand raised to her shoulder), *G* (Pelops), *O* (kneeling girl facing to left, side-view), *M* (three standing horses), a horse walking to left, with bronze chariot to his left, *N* (*paidagogos*), *E* (?), *F* (Alpheios). This arrangement, independently proposed, harmonizes with the obvious sense of Paus., v. 10. 6 (*cf.* also the restoration of Quatremère de Quincy, *Le Jupiter Olympien*, pl. 11, fig. 1).—The same sculptor designed both the eastern and the western pediment, and, if we are willing to recognize two persons of the same name, must have been Alkamenes, the rival of Pheidias. To this, the earlier Alkamenes, is ascribed a statue of Hera near Phaleron made a short time before the Persian wars; the western pediment of Olympia was made soon after the Persian war; the Asklepios of Mantinea by Alkamenes belongs to about 456–453 B. C. To a younger Alkamenes, pupil of Pheidias, are to be ascribed other works of a later date, especially the Athena and Herakles at Thebes, a votive offering of Thrasybulos after B. C. 403. Finally, in the vase-paintings of the period just before and just after the Persian wars we find many analogues for the attitudes and groupings proposed (Sosias, Panaitios, Euthymides, Euxitheos and Olto, and other unnamed artists of the age of Euphronios [in his late works] and Hieron). Probably the eastern pediment was made before the western. If the early date for these pedimental sculptures be adopted we may see in Pindar, *Ol.* I. 94 (in honor of Hiero, composed about 472 B. C.) a distinct reference to them.—PERCY GARDNER, *A Vase of Polygnotan Style*, *M. d. I.*, XI. 38 (pp. 117–25; cut). This Attic vase, now in the Louvre, remarkable for style and beauty has been hitherto inadequately treated (Helbig, Robert, Winter). It belongs to about 450 B. C., the drawing is full of severity, and in the attitudes has something of archaic stiffness. It shows in several respects the influence of the painter Polygnotos (at Athens from 471 B. C.), and thus throws light on the painter and receives light from him. In Polygnotos's *Lesche* (Paus., x. 25–31) the figures were arranged in rows, three in number, but somewhat interlaced, just as in this vase. The design on the reverse (Apollo and Artemis slaying the Niobids, conceived in Polygnotan style) suggests that the adventure of the Argonauts—depicted on the obverse—took place near Dindymos or Sipylos, and was probably one of the adventures in the mountains near Kyzikos described by Apoll. Rhod., I.

940-1020 and reflected in electrum staters of Kyzikos. The figures are identified as Athena, Herakles, Jason, Kastor, Polydeukes, Tiphys; in the lower foreground, Peirithoös and Theseus, seated together in an attitude suggestive of their destiny—a Polygnotan motive; at the left is the disappearing Hylas, represented as a youth in armor, and the warrior Polyphemos; the figure behind Herakles may be Telamon.—E. A. GARDNER, *Early Greek Vases and African Colonies* (pp. 126-33). I. *The Polledrara Vase; Micali, Mon. Ined., pl. IV.* This vase is not Naucratic in origin, as is shown by a consideration (1) of the ware, which points, if the vase be an importation from the East, to Mytilene, not Naukratis, as its source; (2) of the polychromy, in which the application and choice of color (blue) is non-Naucratic; (3) of the style and nature of representation. II. *Vases from Caere.* Dümmler suggests that the vases at Caere described by him (*Röm. Mitth.*, 1888) were imported from Asia Minor, since they resemble pottery from Kyme; he propounds two alternatives: (1) the Caere vases came from Phokaia; thus are explained their Rhodian elements, and the familiarity with Egypt through participation in the colonization of Naukratis. In that case the fragments from Kyme show a local variety of the style, and the Italian group quoted will show the decadence of this same style, which may probably have been transported by means of the Phocæans at Elea. (2) The fragments from Caere are an importation from Phokaia. In that case the hydrias from Caere will represent an impetus of the same style in the colony of Naukratis; we must hold the same view of the Italian vases as in the former case. The writer protests against the second proposition: there seems to have been no manufacture of local vases at Naukratis after the end of the sixth century. Perhaps there is, however, an affinity between the Caere hydrias and the vases of Daphnai in Egypt, as is suggested by apparently similar designs of grotesque dancing satyrs found on the two classes of ware. III. *Cyrenaic Vases.* A supplementary correction of *Naukratis*, vol. II, p. 51, in which data are presented suggesting a Naucratic origin for certain Cyrenaic pottery.—W. WATKISS LLOYD, *The Electra and Antigone of Sophocles* (pp. 134-46). Literary and esthetic criticism of the plot and characters of the two plays.—W. M. RAMSAY, *A Study of Phrygian Art: Part II* (pp. 147-89; 20 cuts). The writer adheres to his view that the Lion-Gate at Mykenai belongs to the period of the Dorian Kings of Argolis (B. C. 800-750) but urges that the tombs within the precinct are much earlier. The article consists in large part of corrections of the statements and views of Perrot and Chipiez on Phrygian art, especially that the Midas-tomb was not a tomb: incidentally the origin of the characteristic Phrygian ornamental pattern (chess-board pattern of squares alternately sunk and in relief) is traced to an imitation not of carpet design but of tile-work in relief (and

this was learned from Assyria). There are also detailed accounts of many minor monuments. In conclusion, the writer suggests that the word *sikeneman* in the Midas inscription (=Greek *κνονμαν*, "grave") means "grave-monument," and that the Phrygian alphabet was derived from the Greek through Kyme-Aiolis and not from Miletos by way of Sinope and Pteria.—AD. MICHAELIS, *The Imperial German Archæological Institute* (pp. 190–215). A sketch of the history of the Institute and of the earlier *Instituto di Corrispondenza Archeologica*, followed by an account of the publications, periodical and special, and of the present organization and purposes of the Institute.—W. M. RAMSAY, *Artemis-Leto and Apollo-Lairbenos* (pp. 216–30). Eight new inscriptions, with several already published by Hogarth in *JHS* (1887, pp. 378 ff.), are here examined with reference to the light they throw on the popular feeling, in Græco-Roman times, of the native population of western Asia Minor toward the goddess then designated by them as Leto ("Mother") and toward her son Apollo. Many notes on miscellaneous matters connected with these cults follow.—J. E. HARRISON, *Two Cylices relating to the exploits of Theseus* (pls. I, II). As Milani (*Museo Italiano di antichità classica*, III. 1, pp. 236 ff.) has treated of the exploits of Theseus on vase-paintings, this paper is confined to the elucidation of two unpublished but important vases of this cycle. No. 1, the Tricoupi red-figured kylix (pl. I), represents (rev.) Herakles and Antaios, (obv.) Theseus, slaying Prokrustes, and (interior) a youth with kylix and oinochoe. The inscriptions are *καλὸς Ἀθηνόδοτος*—which suggests about 500 B. C. for the vase, since this name is associated with that of Leagros (Klein, p. 132), who died as *strategos* in 467 B. C. (Studniczka, *Jahrb.*, 1887, p. 161)—and *ΔΟΡΙ* (= *Δοῦρις*). If the vase be the work of Douris, the *lekkythos* published in *Εφημ.*, 1886, p. 41, IV. 4, rejected by Klein, must belong to the same artist. No. 2 is the De Luynes fragments of a red-figured kylix in the Bibliothèque Nationale, Paris (pl. II). A restoration of this extremely fragmentary vase is attempted: Miss Harrison sees on the exterior the following exploits of Theseus: (1) Bull of Marathon, (2) Sinis, (3) Skiron, (4) Prokrustes, (5) Phaia, or the sow of Krommyon, (6) Minotaur, (7) Periphetes. The central design is of Theseus and Kerkyon. The fragments are later than the Chachrylion vase (Milani, *a*) and earlier than the British Museum kylix (Milani, *t*); the vase was perhaps the work of Euphronios.—A. S. MURRAY, *Archaic Etruscan Paintings from Caere* (pp. 243–52; pl. VII; 4 cuts). Five terracotta slabs, lately acquired by the British Museum, come from the interior of a tomb in Cervetri. They are covered with archaic paintings representing two large sphinxes, and men and women, the latter apparently mourners. They have been already described in the *JOURNAL*, V, p. 519. These paintings, which are dated about 600 B. C., show that Corinth was

not the only original centre from which the Etruscans were influenced in their vase-paintings and wall-paintings; they indicate an influence from Asia Minor, possibly by way of Egypt (impersonated in Pliny's *Philocles*, indifferently termed Egyptian and Samian). Signs of Asia Minor influences are the Assyrian motives in the paintings, the decoration of the borders of the garments, the guilloche, pomegranates, the standard surmounted by the figure of a bull borne by one of the men (Herod., i. 195), etc. The Romans borrowed this device for standards from the Etruscans, they from Asia Minor, while into Asia Minor it came from Assyria. At the same time it must be remembered that in Egypt there were native Phœnician craftsmen whose wares would find their way to Etruria: Caere itself—originally Agylla, Phœnician for “round town”—was anciently a Phœnician factory.—A small archaic *lekythos* (pl. v) [see *JHS*, 1890, p. 167].—E. A. GARDNER, *Archæology in Greece 1889-90* (pl. viii [plan of the Athenian acropolis in 1889]; 4 cuts). A detailed and comprehensive report on excavations and archæological research, on museums and administration (including directions for cleansing and preserving bronzes and marbles), and on Byzantine antiquities. A note is appended on the base inscribed with Antenor's name and the statue placed upon it by Studniczka (*Jahrb.*, 1887, pp. 135 seq.): the writer denies a necessary connection between the statue and the base.—NOTICES OF BOOKS. HERMANN, *Das Gräberfeld von Marion auf Cypern* (J. A. R. M[unro]); *Naukratis, Part II* (W. W[roth]); BENNDORF and NIEMANN, *Das Heroon von Gjölbaschi-Trysa* (P. G[ardner]); BABELON, *Le Cabinet des Antiquités à la Bibliothèque Nationale*, Ser. 1, 2 (P. G.); IMHOOF-BLUMER and O. KELLER, *Tier- und Pflanzenbilder auf Münzen und Gemmen des klassischen Alterthums* (P. G.); SCHREIBER, *Die Hellenistischen Reliefbilder*, Lief. i. (P. G.); BENNDORF, *Wiener Vorlegeblätter für Archäologische Uebungen* (P. G.); PARIS, *La Sculpture Antique* (E. A. G[ardner]); HEAD, *Catalogue of Greek Coins in the British Museum: Corinth, Colonies of Corinth, etc.* (W. W[roth]); EVANS, *The “Horseman” of Tarentum* (P. G.); BUSOLT, *Griechische Geschichte bis zur Schlacht bei Chaironeia*, 2 Teil, and HOLM, *Griechische Geschichte*, 2 Band (A. G[oodwin]).

Vol. XI. 1890. No. 1. April.—EXCAVATIONS IN CYPRUS, 1889. SECOND SEASON'S WORK.—POLIS TES CHRYSOCHOU.—LIMNITI (pls. iii, iv, v). J. A. R. MUNRO, i, *Preliminary Narrative*; ii, *The Tombs*; iii, *Contents of the Tombs* (pp. 1-60; 16 plans and cuts). Excavations at Polis-tes-Chrysochou were carried on between Feb. 15 and April 15, in the cemetery: nearly 200 shafts were sunk, and 165 productive tombs of three different types were excavated, for the most part of Hellenistic and Roman date. Large quantities of pottery of the utmost variety were obtained, but little else. iv. H. A. TUBBS, *Inscriptions* (pp. 60-82; facsimiles). These were

sepulchral, both Greek and Cypriote, and belonged mainly to the fourth century B. C. The vases yielded many *graffiti*, mostly Cypriote. 45 proper names are supplied by the Poli inscriptions. v. H. A. TUBBS, *Excavations at Limniti* (pp. 82-99; map and 5 cuts). Here was unearthed a "grove-shrine" of the Phœnician natives (date 450-300 B. C.) and many ex-votos were discovered, including statuettes in bronze and terracotta, one of which represents Apollo Amyklaïos (Resef-Mikal). Several heads were also brought to light; they are of three types, Cypriote, Shémitic, and Hellenized. There were found, also, statuettes of women in hieratic pose, properly belonging to graves.—E. A. GARDNER, *Two fourth-century children's heads* (pp. 100-108; cut). In *JHS*, 1888, pl. x, the writer had published a fourth-century head of boy (Eros ?) from Paphos. Here is published a grave-stele from Lerna (now in the Argos Museum), inscribed ΚΗΦΙΞΟΔΟΤΟΞ, with the head of a boy about six or eight years of age. It appears, with the Paphos head, to belong to the Attic (not Argive) school of the fourth century; these works are interesting as showing an attempt, unusual at that time, to render young children realistically, not conventionally assimilated to fully-grown men, nor with the roundness of infancy.—E. L. HICKS, *Ceramus (Κέραμος) and its Inscriptions* (pp. 109-28). Mr. W. R. Paton furnishes a sketch of the topography of the region. Ten new inscriptions are published. No. 1, of 25 lines, is a decree of Keramos in honor of a noted citizen (about 168 B. C.) for services rendered as a popular leader and diplomat. No. 3, honorary, about B. C. 200. No. 5, 23 lines, of Roman times, is a decree ordering a statue for an Eirenaios, who had left by will an estate to the town. No. 6 is a dedication of the time of Trajan, and No. 9, on the architrave of a gateway, is of a similar character. Nos. 11-15 are inscriptions from Keramos already published (Babington, *Trans. Roy. Soc. Lit.*, vol. x).—E. A. GARDNER, *The Processes of Greek Sculpture as shown by some unfinished statues in Athens* (pp. 129-42; 5 cuts). Six unfinished statues, belonging to different periods of Greek art and representing also different stages in the completion of the artist's work, are examined, and many interesting conclusions arrived at. The Greek artist wrought freely, without the use of *puntelli*.—C. WALDSTEIN, *Τραπεζώ and Κορμώ in the frieze of the Parthenon* (pp. 143-45; cut). The writer accepts Miss Harrison's suggestion (supported by W. W. Lloyd), that the two figures waiting on the priestess in the central slab of the Parthenon frieze were designated *Τραπεζώ* and *Κορμώ*, and publishes a terracotta figurine of the early fifth century B. C., which represents a woman holding above her head a low stool with a cushion. This terracotta, found in a grave, probably commemorates the fact that the occupant of the grave once held the sacred office represented on the Parthenon frieze. The writer also suggests that the numerous archaic marble statues of maidens and women

found of late on the Acropolis do not represent any deity, but may be statues of priestesses or other officials placed on the Acropolis in honor of Athena and in commemoration of the sacred office once held.—P. GARDNER, *A Stele Commemorating a victory in a boat-race* (pp. 146–50; 2 cuts). This stele—perhaps of Hellenistic but probably Roman times—now in the Central Museum in Athens represents, above, three standing figures: (1) the *κελευστής*, steersman and captain, in chlamys, crowns (2) the central figure, a man in himation, doubtless that of the undertaker of the *λειτουργία*; (3) at the left stands the stroke, naked, with palm leaf in left hand, placing with his right hand a wreath upon his own head. Below—the intermediate space being probably covered with a painted inscription, now effaced—is represented a long low boat—perhaps a *ὑπηρετικόν*—with eight naked oarsmen (without oars), of whom the one at the bow carries a wreath and palm. This stele adds to our information on a subject already treated by the author in *JHS*, II, pp. 90 *seq.* and 315 *seq.*—D. G. HOGARTH, *Notes in Phrygia Paroreus and Lycaonia* (pp. 151–66). These are notes of a journey made in July 1887, and the results consist of (1) 31 inscriptions, three of which are partly of the late Phrygian dialect (*cf. Acts*, XIV. 11); none of them have topographical value, and most are sepulchral of late date; (2) a route map from Boluwodun to Konia was prepared and is here published with numerous notes and observations.—CECIL SMITH, *A protokorinthian lekythos in the British Museum* (pp. 167–80; pls. I, II; 2 cuts). This little vase (0.068 m. high) is beyond doubt the most beautiful and important specimen of its class (*cf. Berlin Vasensam.*, No. 336). The neck and head represent a lion's head realistically rendered: on the body is a row of warriors with shields, fighting; below these, the representation of a horse-race, and, on the lowest part, a hunting scene: no part of the vase is without the most delicate ornamentation. Similar subjects and vases of like technique are considered, and the conclusion is drawn (1) that the Proto-Corinthian ware, following shortly after Mykenai, is closely connected with the old Greek Corinthian metal-industry, and so influenced by the Cypriote-Phœnician metal-bowls; (2) the fabrics of Naukratis, Kyrene, and Daphnai were subject to this Cypriote-Phœnician influence at a later date, probably in two ways: directly through communication with the neighboring island of Cyprus; indirectly, through Corinthian importations, as the types of myths there represented show us (*cf. JOURNAL*, vol. v, pp. 401, 518).—L. R. FARNELL, *Various Works in the Pergamene Style* (pp. 181–209; 4 cuts). Claiming—against Ulrichs—that there was distinct influence in Græco-Roman and late-Roman art proceeding from Pergamon, the writer records and classifies the monuments which, on the ground of subject or style, may be regarded as due to this impulse. The characteristics of Pergamene art are to be learned, not from its manifestations in

the older period (Attalos I), of which we have only weak copies (Naples statuettes), but from these original works of the second period (Eumenes II, Great Altar, *etc.*). A number of acute observations, impossible to be summarized, fill up this important paper.—E. A. G[ARDNER], *Archæology in Greece, 1889-90* (pp. 210-17). Brief survey of important excavations, with an account of the new National Museum at Athens. In a note, the writer reiterates his doubt as to the necessary connection between the Antenor base and the statue placed on it by Studniczka (*cf.* above, p. —).—NOTICES OF BOOKS. HARRISON and VERRALL, *Mythology and Monuments of Ancient Athens* (G. C. R[ichards]); SCHUCHHARDT, *Schliemann's Ausgrabungen* (W. C. F. A[nderson]); *STUDNICZKA, *Kyrene* (*id.*); HAUSER, *Die Neu-Attischen Reliefs*; ROBERT, *Die Antiken Sarkophagreliefs*, and HAIGH, *The Attic Theatre* (P. G[ardner]).

No. 2. October.—A. S. MURRAY, *The Alkmene vase formerly in Castle Howard* (pp. 225-30; pls. VI, VII; cut). The writer agrees with Engelmann in interpreting the principal scene as representing Alkmene taking refuge on an altar to escape the wrath of Amphitryon, the latter and Antenor setting fire to a pyre erected in front of the altar, and Zeus sending a violent storm to extinguish the fire, the rain coming down from hydriae in the hands of two figures presumably Hyads (*cf.* Eur., *Alk. Fr.*). He considers the vase, which is signed Πύθων ἑγράψε, to be at least a century later than Euripides, and probably of Italian origin; the latter fact lends support to the theory of the revival of the old Attic tragedies in Southern Italy in the third century B. C.—J. THEOD. BENT, *Recent Discoveries in Eastern Cilicia* (pp. 231-35; pl. VIII [map]; cut [map]). Brief topographical notes of a trip in which Anazarba, Kars-Bazaar (supposed site of Flaviopolis), and Bodroum (by inscriptions identified with Hieropolis Kastabala, the seat of the worship of Artemis Perasia) were the chief points of interest.—E. L. HICKS, *Inscriptions from Eastern Cilicia* (pp. 236-54; facsimiles). Twenty-eight inscriptions, copied by Mr. Bent. No. 1, from Anazarba, of about 250 A. D., shows that the trade-guilds (here, that of fullers) passed unchanged into the Christian church. No. 4, of either 153 or 192 A. D., is a pagan dedication. No. 13 is from Pompeiopolis. Nos. 14-28, from Hieropolis-Kastabala, range in date from 50 B. C. to the third century A. D., and are mainly honorary. No. 27 has beneath a Latin inscription in part referring perhaps to Rutilianus legate in Kilikia 138-161 A. D., four elegiac distichs, consisting of an invocation to Artemis (Euploia) by Leukios, a physician, who prays for a safe voyage homeward for Dexter, the governor, named in the Latin inscription above. No. 28, partly in Latin and partly in Greek, gives the *cursus honorum* of Q. Roscius Sexti f. Pompeius Falco, proconsul of Asia about 128 A. D.—E. L. HICKS, *The Collection of Ancient Marbles at Leeds* (pp. 255-70; pl. XIII, 2 cuts and

facsimiles). These antiquities were obtained in Greece about 1815, and came into possession of the Leeds Philosophical Society in 1863-4. The text of the inscriptions (9 in number) is given. *No. 3*, on a statue base, gives the name of the sculptor Hephaistion, son of Myron (about 90 B. C.); the subject of *No. 4* (200 B. C.) is given by Boeckh: *litigabant Parii et Naxii: res delata ad Eretrienses ut πόλιν ἐκκληστον quorum hoc decretum est* (CIG, 2265). The marbles comprise an altar (dedicated to Aphrodite Timuchos, about 200 B. C.); wall-stone, statue-base (see above), stele with inscribed decree, sepulchral stele (probably from Rheneia); sepulchral altar adorned with delicate carvings; a second sepulchral stele, fourth century B. C., with elaborate *akroteria*; amphora in low relief, details filled out with painting; a third sepulchral stele (pl. XIII) probably of fifth century B. C. (cf. *Ant. Denkm. des Inst.*, I, pl. xxx. 1), on which is represented a female figure standing to right, the *diploidion* gathered into a fold upon her bosom; fragments of two marble doors, showing in marble the bronze nails and the gorgoneion, and belonging to the Hellenistic period; an Ionic capital; a head of Medusa (cf. Friedrichs-Wolters, No. 1559) of Roman date.—W. M. FLINDERS PETRIE, *The Egyptian Bases of Greek History* (pp. 271-77; pl. xiv). Egypt has done for the prehistoric ages of Greece the same great office of conservator which she has performed for the historic period. The discoveries of Naukratis and Daphnai give a firm footing for the chronology of Greek pottery back to 650 B. C.; those at Kahun, up to 1100 B. C.; those at Tell-el-Yuhudiyeh, Gurob, and Abusir, very much earlier data, some of which point to a Græco-Libyan league before 1400 B. C. The general results of Mr. Petrie's excavations are: (1) *That we have dated the Greek pottery to within a generation as far as 600 B. C.*; (2) *that we have dated it to within a century as far back as 1400 B. C.*; (3) *that we have tangible remains of the Greek or Libyo-Akhaian invasions of Egypt as far as this period*; and (4) *that we have pushed back the hazy and speculative region to before 2000 B. C., and shown some reasons for looking to a rise of European civilization before 2500 B. C.*—A. H. SMITH, *The Making of Pandora* (pp. 278-83; pls. XI, XII; 2 cuts). The writer argues that the scene on the sculptured drum of the later temple of Artemis at Ephesos, now in the British Museum, does not represent the story of Alkestis (Robert, *Thanatos*), nor the Judgment of Paris (Benndorf, *Bull. d. Comm. arch. com. di Roma*, 1886, p. 54), but the making and sending forth of Pandora as conceived by Hesiod. The various other representations of the latter scene are examined, and the conclusion drawn that the figures are respectively [Athena, not preserved] Hephaistos, Eros, Pandora, Hermes, a goddess (probably Hera, but perhaps Peitho), Zeus [seated figure, preserved only in part]. The open lips of Hermes probably suggest that the god is breathing the gift of speech to Pandora (Hesiod, *Op. et D.*, 79).—G. C. RICHARDS, *Two*

Greek Reliefs (pp. 284-5). In the basrelief of Hellenistic times from Herculaneum, now in Naples (Harrison and Verrall, *Mythology, etc.*, p. 545), representing the Nymphs, or Charites, etc., the diminutive female figure at the end is inscribed ΤΕΛΟΝΝΗΣΟΣ: this probably stands, not for a single individual but for a community (Telos; cf. Halonnesos, etc.) dedicating the relief. Similarly may we explain the small figure in the archaic relief published by Lechat (*Bull. de corr. hellénique*, 1889).—T. W. ALLEN, *Fourteenth Century Tachygraphy* (pp. 286-93; pls. ix, x). (1) A transcript of the tachygraphical passages in *Vatic. ms. Regina 181* (written in 1364, containing the medical works of Actuarius), with explanations. It appears that there were new developments in tachygraphy after the tenth century. (2) A table of the abbreviations with explanations, preserved in the ms. p. 284 r. (3) The transcript of an unintelligible passage.—E. A. GARDNER, W. LORING, G. C. RICHARDS, W. J. WOODHOUSE, *The Theatre at Megalopolis* (pp. 294-98; 2 cuts [plans]). Plans and section with explanations, provisionally published, of the theatre. The view is expressed that the discoveries at this theatre are fatal to Dörpfeld's theory, that no raised stage existed in the Greek theatre of any period, and the writers assert that they have so far seen no reason for assigning the stage to a later period than the auditorium, known to be of fourth century construction. [But see *Class. Rev.*, 1891, p. 285, where a statement appears, signed by Dörpfeld, Gardner, and Loring, which records the fresh evidence and may be regarded as superseding the premature conclusions of the *Hellenic Journal*.—ED.]—W. LORING, *A New Portion of the Edict of Diocletian from Megalopolis* (pp. 299-342). This fragment, discovered in 1890, is the most considerable that has appeared since the first publication of the Edict by Mommsen in 1851, both from its extent (255 lines) and from the large proportion of it which is entirely new. The most important new parts are: Col. i, ll. 1-3, 49-60 (which set the prices for mills, sieves; it comes between ch. xv and xvi, *CIL*); Col. ii, ll. 1-18 (on colors (?), needles (?), rates for carriage, fodder, down, pens and ink, clothing; it comes between ch. xv and xvi, *CIL*); Col. iv, ll. 1-50 (on garments and weaving, linen, etc.; it comes between ch. xvi and xvii, *CIL*); not to speak of many single words. The annotations are profuse.—CECIL SMITH, *Orphic Myths on Attic Vases* (pp. 343-51; 2 cuts). On a red-figured hydria in the British Museum (N. E. 818—from Rhodes, of Athenian origin, and of fourth century date) is a sketchily-drawn scene representing the devouring of a boy by a Thracian, in the presence of Dionysos and a second Thracian who flees in terror. By a prolepsis common in vase-painting we probably have here: (1) the infant Zagreus torn in pieces by the Titans—one of the most characteristic legends in the mystic-orgiastic Thracian cult which in Athens took root in the form of the Orphic mysteries; (2)

the impending destruction of the Titans; and (3) the outcome of it all, the new Dionysos. The Zagreus myth is not elsewhere found in vase-paintings: the sectarian and exclusive character of the Orphic cult is the reason why Orphic subjects are rare in Athenian art-types, since no great artist would probably have had them prominently before his notice. Indeed, the personality of Orpheus comes but seldom into Greek art. Heydemann has drawn up a list of vases representing Orpheus (*a*) playing to the Thracian women, and (*b*) meeting his death at their hands (*Arch. Zeit.*, 1868, p. 3); to this list the writer adds three new vase-paintings. By a comparison with the Acropolis kylix (*JHS*, ix, pl. vi—probably by Euphronios, 500 B. C.), he discovers an unusual fixity in type, and he suggests that some great painter of the sixth century B. C. may have treated the subject. Furtwängler's theory, that Aischylos, in his *Bassarides*, inspired the conception and Polygnotos created the art-form of it, is difficult to accept, because of the date of the Acropolis kylix, which certainly precedes the production of the *Bassarides*.—NOTICES OF BOOKS. RAMSAY, *Historical Geography of Asia Minor* (W. W.); CONZE, *Die Attischen Grabreliefs* (P. G.); WERNICKE, *Die Griechischen Vasen mit Lieblings-namen* (P. G.); IMHOOF-BLUMER, *Griechische Münzen* (W. W.); SVORONOS, *Numismatique de la Crète ancienne* (W. W.); BURY, *History of the Later Roman Empire, from Arcadius to Irene* (A. G.). J. H. WRIGHT.

MITTHEILUNGEN D. K. DEUT. ARCHAEOLOGISCHEN INSTITUTS. ATHENISCHE ABTHEILUNG. Vol. XVI. No. 2. 1891.—P. WOLTERS, *The Athena Hygieia of Pyrros* (pl. 6; 2 cuts). The story told by Pliny (*NH*, 22. 43, cf. 34. 81) about the Splanchnoptes dedicated by Perikles is not to be connected with the report given by Plutarch (*Perikles*, 13) that Perikles dedicated a statue of Athena Hygieia. The base, still *in situ* at the southeast corner of the Propylaia, cannot belong to the statue dedicated by Perikles. The inscription (Loewy, No. 53, *CIA*, I, 335) mentions the Athenians, not Perikles, and the base was evidently made to correspond to the level of the Propylaia after the original plan of the architect was given up. The base was, then, made after the beginning of the Peloponnesian war, but, judging from the lettering of the inscription, not long after the beginning. The occasion of the dedication of the statue by the Athenians may have been the cessation of the pest. The altar to the east of the base of Pyrros was probably the altar of Athena Hygieia, and was erected soon after the building of the Propylaia. The statue by Pyrros was a votive offering, not a cult-statue. The previous hypotheses concerning the type of this statue are shown to be groundless.—A. THUMB, *Inscriptions from the Greek Islands*. 20 inscriptions from Thera are published (chiefly fragmentary) votive or sepulchral. No. 1 is hon-

orary. A corrected reading of an inscription from Ios (Ross, *Inscript. ined.*, No. 93) is given. From Amorgos 12 inscriptions, besides the marks on some Roman tiles, are published. The inscriptions are chiefly sepulchral, of late date, and fragmentary. No. 10 is an honorary decree of Arkesine in honor of Alexion son of Dionysios. No. 11 appears to be part of an account. No. 12 is a collection of inscriptions upon vase-handles in Arkesine.—B. SAUER, *The ἀγάλμα of the Archermos-base* (8 cuts). Comparison of several archaic Nike-figures shows that the Delian Nike could not fit the base with the Archermos-inscription. The only kind of figure represented in archaic art that would fit the base is a sitting quadruped. As Mikkiades and Archermos were Chians, perhaps the figure dedicated by them was the heraldic beast of Chios, the sphinx.—A. CONZE, *Hermes-Kadmilos* (cut) (*cf. Athen. Mitth.*, 1887, p. 202 ff.). A fragmentary marble relief in the British Museum is published. Kybele, a bearded draped divinity, and Hermes occupy the right end of the relief. Above Kybele are two Korybantes. The upper left-hand part is occupied by the prow of a ship and a small nude figure. Below this the stone is broken. The missing part doubtless represented the mariner who dedicated the relief.—G. WEBER, *The Subterranean Course of the Lykos near Kolossai* (2 cuts). Herodotos (VII. 30) says that the river Lykos disappears for five stadia near Kolossai. Modern writers have accepted and tried to explain this phenomenon. The statement of Herodotos is incorrect. Such a tunnel never existed. The river flows through a deep gorge, in the upper part of which it has worn several short tunnels through the limestone rock. The town of Kolossai had an excellent natural citadel. In the neighborhood are many gravestones of peculiar form (cut). The inscriptions (one is published) forbid strangers to make use of the graves under penalty of a fine to be paid to the *tamieion*.—A. BRUECKNER, *The Realm of Pallas* (pl. 7; 4 cuts). A red-figured vase from the Akropolis (cut after Έφ. Ἀρχ., 1885, pls. 11, 12), belonging to the period before 480, represents the combat of Theseus and the Minotaur in the presence of the four kings, Oeneus, Pallas, Nisos, and Lykos. The story of these four sons of Pandion originated in the time of Peisistratos. The realm of Pallas was the whole Paralia. The centre of his power, the deme Pallene, is found, after careful discussion of ancient authorities, inscriptions (several of which are published), and topographic peculiarities, to have been near Koropi, where the remains of an ancient settlement are found. Here was the scene of the defeat and death of Eurystheus, and of the victory of Peisistratos over the army of his opponents. Here was also the temple of Athene Pallenis, under whose guidance Peisistratos was brought to Athens. The deme Agnus lay near Pallene, at Markopoulo.—TH. MOMMSEN, *Inscription from Apameia*. This fragmentary Latin inscription relates to

the Asian year. It supplements the inscriptions previously known (*CIG*, 3902 b, 3957) containing letters of the proconsul Paullus Fabius Maximus (A. U. C. 744-753) giving an arrangement of the year hardly different from that of the Julian calendar.—S. SELIVANOV, *Supplement to inedited Rhodian Inscriptions*. Emendations and supplements to the inscriptions, *Athen. Mitth.*, 1891, xvi, pp. 107-126. Two sepulchral inscriptions are published, one of which mentions *θυγατροποία*.—J. WACKERNAGEL, *Athen. Mittheilungen XVI*, p. 112. The inscription published in the article referred to is here read and explained differently, *σάμα τόζ' Ἰδαμενέος ποίησα λίνα κλέος εἴη Ζεὺς δέ νιν ὅστις πημαῖνοι λειώλη θείη*.—E. SZANTO, *The Rock Outlook near Smyrna*. The place hitherto explained as a fortified post of observation on the rock (*Felswarte*) near the "Homeric" town of Smyrna, is here explained as a sacred place for sacrifices.—M. MAYER, *Myron's Perseus*. Pliny (*NH*, iv. 57) says (Myron) *fecit . . . et Perseum et pristae*. The *pristae* have been explained in various ways. The simple translation would be "sawyers" or "carpenters," and this is here adopted. Myron, then, represented Perseus (and his mother Danae) being put in a box by carpenters. Vase-paintings representing similar scenes are cited.—*Supplement to Athen. Mittheilungen XV*, p. 332. The smaller inscription from Magnesia on the Maiandros is given in a more correct form.—*Correction of a reference, Athen. Mitth.*, XV, p. 362 (P. W.).

—LITERATURE.—DISCOVERIES. Discoveries at Athens, Mykenai, Tiryns, Mideia (?), Epidaurus, Megalopolis, Lepreon and Magnesia on the Maiandros are described (see *News*). Four fragmentary inscriptions from Thessaly and five from Salonichi are published.—REPORTS OF SITTINGS.

HAROLD N. FOWLER.

REVUE DES ÉTUDES GRECQUES. Vol. III. 1890. Oct.-Dec.—H. WEIL, *On certain fragments of Sophokles*. Emendations of *Fragg.* 598, 142, 140, 532, 672, 788, 174, 334, 864, 327, 378, 221.—S. REINACH, *The Pythian Oracle at Delphoi: Answer to the People of Magnesia* (pl.). An inscription (48 lines) discovered at Magnesia *ad Maeandrum* in July 1890, is here published, with explanatory notes. It is an ex-voto to Dionysos, offered at about the time of the Christian era by one Apollonios Mokolles relating to a miraculous event that occurred in the fourth or third century B. C. (*cf. JOURNAL*, vol. VI, p. 552).—TH. REINACH, *The Kings of Commagene* (pl., monument of Philopappos at Athens). By the aid mainly of the inscription of Nemrûd-Dagh (best edited in Humann-Puchstein, *Reisen in Klein-Asien und Nord Syrien*, 1890), the writer makes many inferences as to the personality, history, activity of more than 30 persons connected with the family of Antiochos I. A convenient genealogical table is appended.—H. OMONT, *The "Typicon" of the Monastery of St. Nicolas di Casole near*

Otranto: notice of MS. c. III, 17 of Turin (Royal Library). Palæographic notes on this ms. of offices in use at this monastery (1174 A. D.). Marginal and other notes in this ms. supply the names of the abbots from 1099 to 1392, and give varied information as to the history of the monastery within those years. The ms. also contains a poem, here printed, on the abbots; and various notes on the library, with the names of the borrowers of the books (mainly liturgical), and rules as to the use of books and as to copyists, with fines.—C. BELLAIGUE, *Three Lectures on Ancient Music by M. Bourgault Du Coudray*.—CHRONIQUE. EPIGRAPHICAL BULLETIN (B. Haussoullier). Account of the contents of *Inscriptiones Græcae Siciliae et Italiae, additis Græcis Galliae Hispaniae Britanniae Germaniae Inscriptionibus* . . . ed. G. Kaibel, Berlin, 1890.—LETTER FROM GREECE (D. B[ikelas]), on politics.—PROCEEDINGS of the Association for the Encouragement of Greek Studies.—ANNUAL BIBLIOGRAPHY (1889-90).—*The Ἀθηναίων πολιτεία of Aristotle* (B. Haussoullier).—*The New Fragments of the Antiope of Euripides* (H. Weil). Text and emendations.

Vol. IV. 1891. Jan.-April.—G. MASPERO, *Address as President of the Society for the Encouragement of Greek Studies in France*, April 2, 1891 (pp. VI-IX).—P. GIRARD, Secretary, *Report on important publications* (Croiset, *Histoire de la littérature grecque*; Dareste, Haussoullier and Th. Reinach, *Recueil des Inscriptions Juridiques Grecques*; Omont, *Facsimilés des mss. grecques*; Max Egger, *Dion. Halic. sur Lysias*; Cougny, *Anthol. Pal.* iv.; Tardieu, translation of Strabo; Th. Reinach, *Mithridates Eupator*; E. Pottier, *Les Statuettes de terre cuite dans l'antiquité*; Sakkelion, *Catal. des mss. . . . de Saint-Jean de Patmos*; Latyshev, *Rec. d. inscriptions grecques de la région du Bospore Cimmérien*; Dürrbach, *L'Orateur Lycurgue*; Monceaux and Laloux, *Olympia*; Kanellakis, *Χιακὰ ἀνάλεκτα*).—R. DE TASCHER, *Ionic Cults in Attika, and the Beginnings of Athenian History* (pp. 1-24). The spread of certain cults (chiefly of Apollo and Poseidon) in Attika, from the east to the west, and from the coast inland, appears to confirm Curtius's theory of the Ionic origin of the Attic Greeks.—S. LÉVI, *Greece and India* (pp. 25-45). Popular sketch of ancient contact between Greece and India, as shown in Hindu vocabulary, coins, inscriptions, historical writers, science, literature (drama, romance).—A. H. SAYCE, *Greek Inscriptions from Egypt* (pp. 46-57). Mainly graffiti. *No. I.* 1-4, from Debbabiyeh, are of *προσκυρήματα* of various persons some of whom have new names; the dates are 198(?), 221, 232 A. D. *No. II.* 1-7 are from a cemetery near Assuan, on the west bank of the Nile; they are on very peculiar coffins or sarcophagi, and are interesting as being Greek (or Latin) names with Egyptian patronymics. *No. III.* 1-41 are mainly from near Silsilis and Heschan, where upon the rocks are also carved many similar inscriptions in hieroglyphics, demotic, Phoenician, not to speak of single Cypriote

and Carian *graffiti*. They are of late date and very brief. No. IV. 1-10 are from near Ekhmîn: 1-3 are of a sort of hunting club that kept up a menagerie and had a hunter-in-chief at their head. In No. V. 1-2 a corrected reading is offered of the inscriptions already published in the *Revue*, 1888, p. 311. No. VI gives six brief inscriptions from tombs near Deir el-Zosseir; one is in Cypriote characters, and near it was found a Carian inscription, not however here copied.—CH. BARON, *On the Unity of Composition in the Phaidros of Plato* (pp. 58-62).—NOTES AND DOCUMENTS. H. OMONT, *The Publication of Montfaucon's Palæographia Græca*. Text of the contracts made by Montfaucon, in 1708, with three Parisian publishers, and with his engraver (Giffard, Jr.), for the issue of this work.—H. OMONT, *Montfaucon and l'imperium orientale of Banduri*. Letter from Montfaucon showing the aid rendered by him to Banduri.—É. LEGRAND, *Unpublished poems of Theodore Prodromos*. Introductory remarks, and texts of seven short poems from the copy of "Alphonsus Atheniensis" (about 1473).—É. LEGRAND, *Contributions to the biography of Simon Portus*.—Th. REINACH, *The Drakonian Constitution and that of B. C. 411, according to Aristotle*. The author, with J. W. Headlam, rejects ch. 4 of Aristotle's *Respub. Athen.* (Ed. Kenyon) as unhistoric, probably not an interpolation into Aristotle's text [see, however, below, p. 368], but composed about the close of the Peloponnesian war and inserted into the documents from which Aristotle subsequently drew. Several new readings are proposed.—MISCELLANIES. *A Greek poem on the death of Louis XVI*, of 53 lines printed in the *Εφημερίς*, Vienna, Jan. 28, 1793.—LETTER FROM GREECE (D. B[ikelas]), on the political situation.—PROCEEDINGS OF THE ASSOCIATION.—NOTICES OF BOOKS. BURY, *Nemean odes of Pindar*; Demetrius Gr. Camporoglou, *Ἱστορία τῶν Ἀθηναίων. Τουρκοκρατία. Περ. πρ. Τομ. Α'.*

May-June.—G. A. COSTOMIRIS, *Studies on the unpublished works of ancient Greek medical writers: III series*. IX. Alexander the Sophist (perhaps b. 60 B. C.). X. Timotheos the grammarian (ab. 480 or 710 A. D.). XI. Leon the philosopher: he was emperor of the East in 886 A. D. XII. Theophanes Nonnos, of the tenth century. XIII. *Τὰ ἐφόδια τοῦ ἀποδημούντος*, a translation from the Arabic of Abu Djafar's *Zad el-Mouçafir*, about 1000 A. D. There are 22 mss. of this work, of which a long account is here given, but only one of the Arabic original (in Dresden).—G. SCHLUMBERGER, *Unpublished Byzantine Seals: II series* (29 cuts). Here are published 68 seals, for the most part of the tenth or eleventh century, and none earlier than the seventh century: they come from different parts of the Byzantine empire, and belonged to various civil and ecclesiastical functionaries (archbishops, bishops, deacons, neophytes, notaries, commissioners, *hypatoi*, *ostiarîi*, etc.). No. 34 is very interesting: it is the seal of Nicolas, patriarch of Constantinople (either Nicolas I Mysticus—patriarch 896-908 and 912-

25, or Nicolas II Chrysobergos, 982-95), upon which is the impression of the seal of Julian, metropolitan of Seleukeia. This is the only known instance of one seal officially countersigned by another. Possibly, however, the older patriarchal seal was used by Julian simply in lack of a better plan.—TH. REINACH, *Aristotle or Kritias?* In the newly discovered *Ἀθηναίων πολιτεία* three passages are distinctly to be recognized as interpolations, viz.: (1) c. 4 (Kenyon), on the constitution of Drako; (2) c. 8 *ad init.*, on the electoral system introduced by Solon; and (3) the larger part of c. 25, on the rôle played by Themistokles in the humiliation of the Areopagos. The first and second passages give an account of arrangements that are an anachronism and that strongly resemble those adopted by the oligarchic revolutionaries in 411 B. C. The third passage tells a story that might well be invented by an upholder of the Areopagos. Neither of these three passages is referred to as Aristotelian by Plutarch or the lexicographers; hence they must be regarded as interpolations made from marginal notes into the archetype of *B. M. papyrus No. 131*. The author from whom these marginal notes were drawn was probably Kritias, the chief of the Thirty, who is known to have written *πολιτεῖαι* of the Lacedæmonians, Thessalians, and Athenians.—P. GIRARD, *Thespis and the Origin of Tragedy*. After reviewing in detail the literary evidence (names of plays ascribed to Thespis, and various biographical data), the author infers that the distinctive work of Thespis was the introduction of national legends as themes for dramatic representation, and the judicious invention and use of means by which scenic illusion was heightened (white masks, red for men, etc.). His plays can by no means have been primitive or rudimentary in character.—NOTES AND DOCUMENTS. T. R[EINACH], *An Archaic Inscription from Argos*. Certain emendations are proposed in an inscription published by Fröhner, *Rev. Arch.*, and a translation offered.—A. E. CONTOLEON, *Inscriptions from Asia Minor*. Three inscriptions from Thyateira are here printed in minuscule: they are honorary and belong to the second century A. D.—H. OMONT, *Note on a portrait of Manuel Chrysoloras in the Louvre* (plate). This is the only authentic portrait extant of this scholar and diplomat.—*The Will of Nil Damilas*, dated April 22, 1417. The text of the will of this member of the Cretan family of the Damilas who was the first printer of a Greek book is given here in full, with notes.—*An Unpublished Bull of Gabriel, patriarch of Achrída*. A picturesque account is given of Gabriel's visit to Tübingen in August 1587, with the text of the encyclical letter that he bore (signed by 31 prelates), and that of his letter of introduction from Pope Sixtus V to King Stephen of Poland. The bull here printed is that by which Gabriel appoints a certain Jeremiah metropolitan of Philippi (Πελαγονίας καὶ Περγαίτου).—CHRONIQUE. ARCHÆOLOGICAL BULLETIN. Text of the convention between France and Greece relating to the exca-

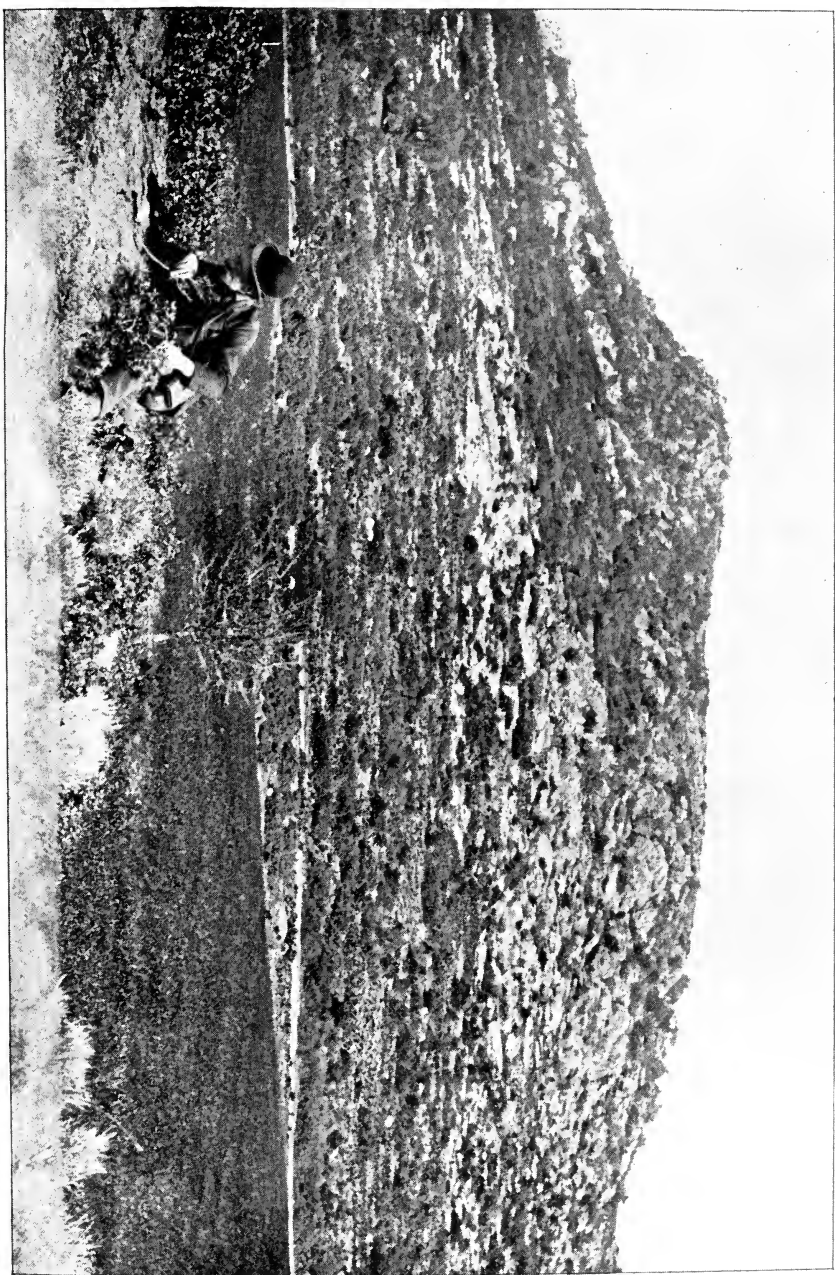
vation of Delphi. Brief report of recent discoveries at Athens, Rhamnous, Eretria, Thespiæ, Lykosoura, Epidauros, Melos, Nisaea (Thrace), Kertch, Magnesia ad Maeandrum, etc. (T. R.).—LETTER FROM GREECE (D. B.).—NEWS: *Necrology* (Schliemann, Simonides); *Academies*; *Learned Societies*; *Archæological Schools*, etc. (Russian at Constantinople); *Miscellaneous* (sale of the Gréau collection, etc.).—NOTICES OF BOOKS. FR. CAUER, *Hat Aristoteles die Schrift vom Staat der Athener geschrieben?* (H. W[eil]); MAHAFFY, *A History of Greek Classical Literature* (T. R[einach]); CANTARELLI, *I Motaci Spartani* (Am. H.); BONNET, *Qu'est-ce que la philologie?* (T. R.); C. H. YOUNG, *Erechia, a deme of Attica*.—CORRIGENDA.

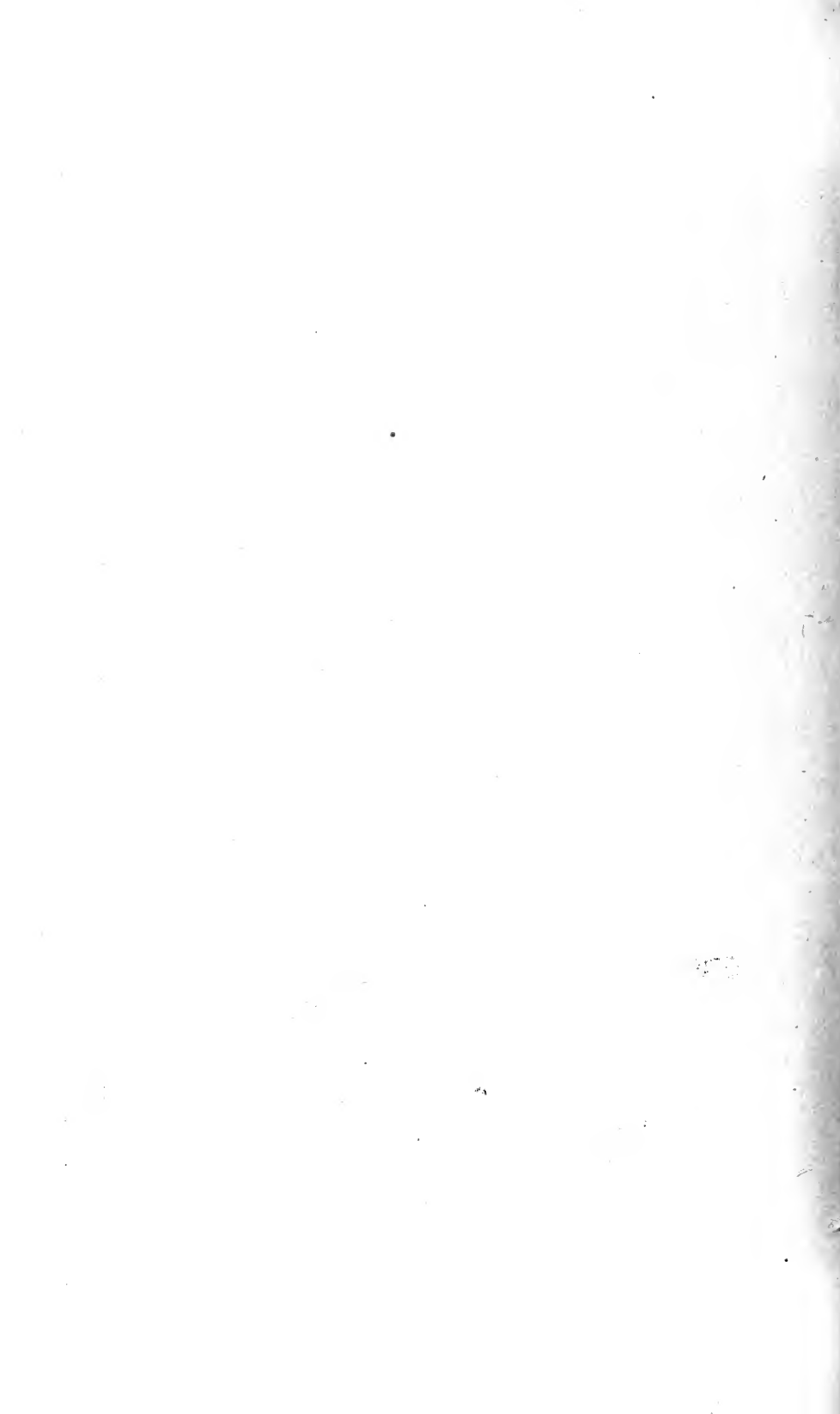
July-Sept.—TH. REINACH, *Herodas the Mimographer*. Semi-popular account of the recently discovered poems of this writer, after Kenyon and Rutherford, with spirited abstracts of the contents of the six longer mimes: there are also a few original observations.—CH. ÉM. RUELLÉ, *Aristotle's problems in music*. Careful translation, with prefatory notice and footnotes, critical and exegetical, of § 19 of Aristotle *περί προβλημάτων* (Bekker, pp. 917-923*).—S. REINACH, *Two inscriptions from Asia Minor*. I. Fragment of a compact between the people of Agai and Olympos (of the closing years of the fourth century B. C.) with reference to the impost on small cattle. This short inscription supplies the following new words to Greek lexicography: *ἔπερος* ("ram"), *ἄρνηάς* ("ewe"), *χιμαυράς* ("she-goat"), *ἔταλον* ("young animal;" cf. *ἄταλός*), and adds to our knowledge of the Aeolic dialect in Asia Minor. II. The Sanctuary of the Erythraean Sibyl. In ancient writers, two traditions as to the origin of Herophile, the so-called Erythraean Sybil, are reported: the first makes her birth-place Marpessos in the Troad; the second, Erythrai opposite Chios. In an inscription recently discovered (first published in *Ἀρμονία*, Smyrna, July, 1891) from the latter place we find an epigraphic record of the second tradition, dating from the second century A. D. The inscription, of 16 elegiac lines, probably not an epitaph, but set up near a statue of the Sibyl in her shrine at Erythrai, represents the aged Sibyl as speaking of her lineage, long life, and labors. The phrasing of the inscription (*πατρίς δ' οὐκ ἄλλη, μούνη δέ μοι ἐστὶν Ἐρυθραί*) shows that a protest is here offered against the Marpessos tradition, as preserved by Paus., x. 12. 6. The new Erythros mentioned in the inscription as the reviver and restorer of Erythrai may be Lucius Verus (about 165 A. D.).—AL. SORLIN DORIGNY, *An Alexandrine phylactery against nose-bleed* (cut). This amulette, a small oval bronze disk, apparently of the third or fourth century A. D., was found at Kyzikos. On it are represented (obv.) the sun and moon, a lion, a woman, (rev.) a mounted warrior, a fleeing angel, a woman, with several legends, hortatory and cabalistic: a reference to nose-bleed is alone seen in the word *ΑΡΑ·Α·Φ*, supposed to

be formed from root *Ra'aph* (רעף).—NOTES AND DOCUMENTS. A. E. CONTOLEON, *Unpublished Greek Inscriptions*. Here are published five honorary inscriptions; *No. 1*, from Thyateira is to a Seleucid; *No. 2* (Philadelphiea) is a rescript of the emperor Caracalla. *Nos. 4, 5* are from Samothrake.—H. DE LA VILLE DE MIRMONT, *Notes on Apollonios of Rhodes*. Critical and explanatory notes, with emendations, on *Argon.* I. 566–7; II. 743–5; III. 847; IV. 289, 308.—EPIGRAPHICAL BULLETIN.¹ (TH. R[EINACH]). A list is given of recent periodicals, treatises and collections (1889, 1890). From these a bibliography of inscriptions there treated is made up, the arrangement being geographical. The more important inscriptions are marked by an asterisk.—NOTICES OF BOOKS. CUCUEL, *Platon, Apologie de Socrate* (T. R.); CH. BARON, *Le pronom relatif et la conjonction en grec, etc.* (T. R.); C. BARON, *De Platonis dicendi genere* (Roberto); E. AUDOUIN, *Dialectes grecs littéraires* (C. E. R.); *Guides Joanne: Grèce. 2^e partie* (T. R.).

J. H. WRIGHT.

¹ We desire to call the especial attention of our readers to this *Bulletin* as giving ample and intelligible information about the literature of recent discoveries in Greek Epigraphy, not elsewhere to be found in so condensed and convenient a form.—ED.













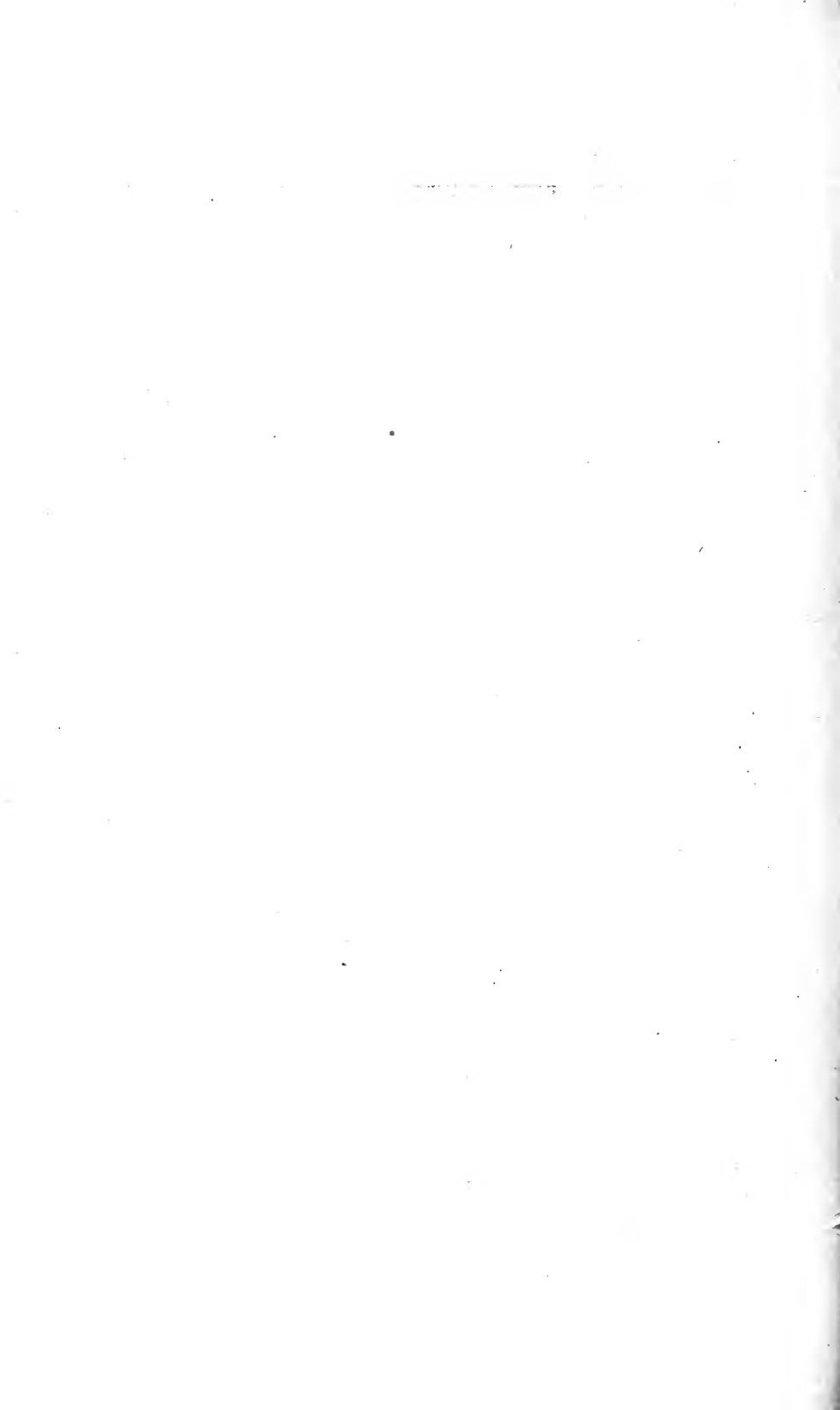




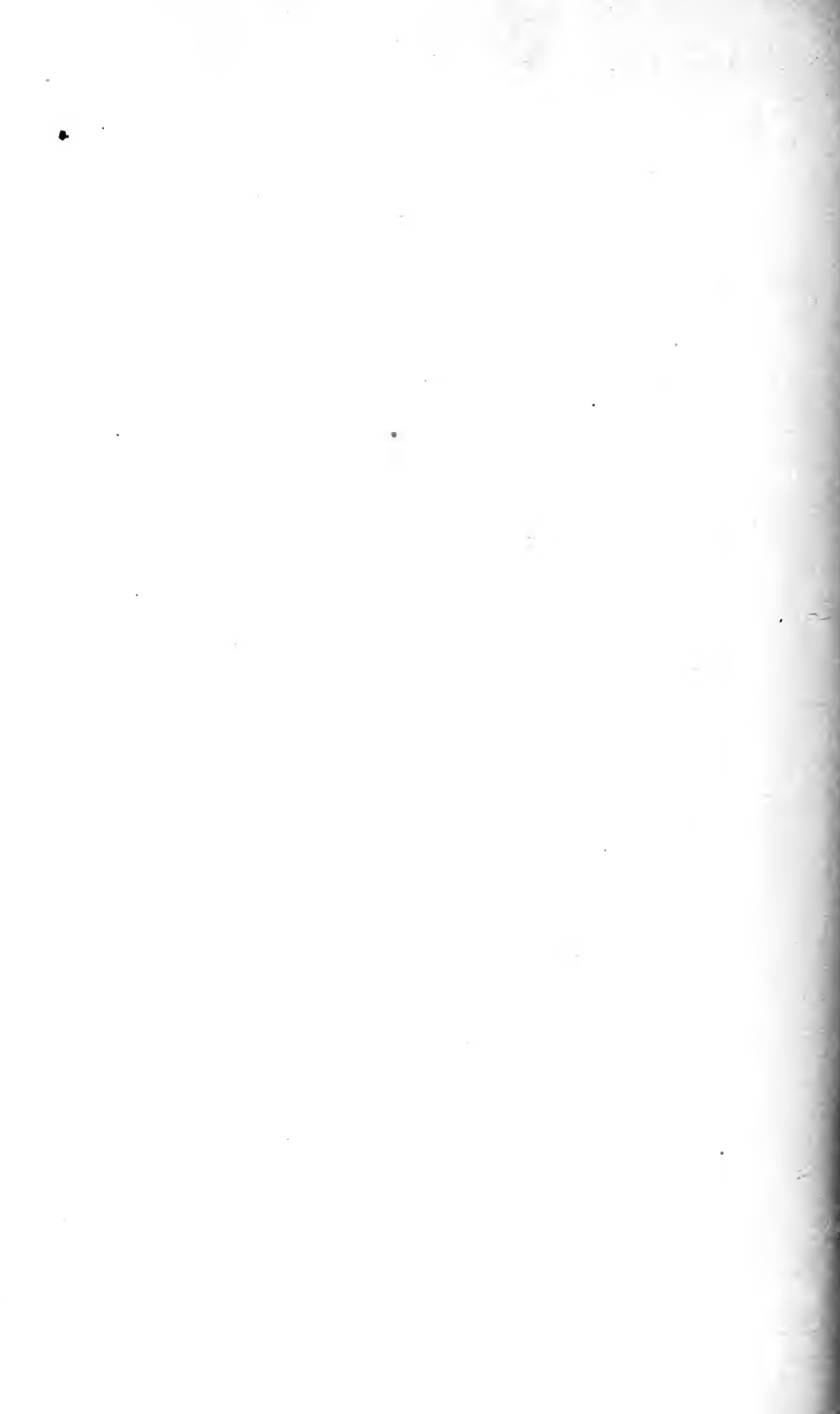


ERETRIA. UPPER GATE-TOWER.

AT *h*. N. E. SIDE OF ACROPOLIS: VIEW FROM THE EAST.







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No. 4.

PAPERS OF THE AMERICAN SCHOOL OF CLASSICAL
STUDIES AT ATHENS.
EXCAVATIONS BY THE SCHOOL AT ERETRIA IN 1891.

VI. A TOPOGRAPHICAL STUDY OF ERETRIA.¹

[PLATES XIV, XV, XVI, XVII, XVIII, XIX.]

INTRODUCTORY NOTE.

In presenting Mr. Pickard's report on the topographical portion of our work at Eretria during the campaign of 1891, I need hardly dwell upon the importance which such careful and sober study of the extant remains of the city has for the settlement of disputed points of topography and history. The final answer to the question as to the site of the early and the later Eretria and the relation which they held to each other, which has recently entered a new phase, can be given only as a result of such careful study of the archæological remains surviving.

Perhaps the only piece of work which still remains to be done in this respect is the investigation of the site of Batheia in connection with some "exploring excavation," which the School may hope to carry out during the season of 1892.

CHAS. WALDSTEIN,
Director.

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Athens.*

¹ In the following pages, no attempt is made to show the historical bearing of the facts presented.

Mr. John W. Gilbert is responsible for all the chain-measurements. The exceedingly rough and bushy nature of a portion of the ground surveyed rendered this work

Eretria lies nearly north from Athens on the western coast of the island of Eubœia, some $4\frac{1}{2}$ hours ride from Chalkis. It is reached from Athens either by steamer leaving Peiræus in the evening, sailing around Sounion, and reaching Eretria early the following morning, or by taking cars to Kephisia, from that point on by either carriage or horse, *viâ* Dekeleia, to Skala Oropou, or on horseback by way of Kalamos and the Amphiareion to the same place. At Skala Oropou boats may be hired to cross the Euripos. The journey by this route occupies 11–12 hours under favorable conditions.

It was on the last day of February, 1891, that we began our survey of the walls of this ancient Eubœan city. The weather was bleak, rendering the management of the instruments somewhat difficult. A few flying snowflakes gave warning of the coming snowstorm, which rendered work impossible for several days thereafter. Our starting-point was just at the foot of the acropolis, on the eastern side of the town, where the modern road to Batheia and Aliveri passes over the foundations of the ancient city-walls. Just at the right of this modern road, concealed beneath slight elevations of earth, are the remains of the towers which guarded the entrance to the city on either side of the "Sacred Way" (see MAP, PLATE XIX). The course of this ancient road can be traced with absolute certainty for miles to the east by the multitude of graves which lie on either side. Some twenty minutes walk from the city-wall, on the south side of this way, was excavated that mausoleum which has been regarded as the possible tomb of Aristotle. The line of the wall from this station *A* runs a little east of south, toward the Euripos, in the direction of the peninsula which protects the large harbor on its east-southeast side.

For the first sixty metres, only a few fragments of the foundations are now above ground. At this distance is a low mound which seems to mark the site of a tower. For the next forty metres scarcely a trace of the wall can be seen, till the line is recovered in a square tower some 6.5 m. by 9 m. in plan. From this point on for 500 metres toward the sea, the line is perfectly clear. It is in this stretch that the plan and character of the wall of the lower city can best be studied. The builders seem to have avoided using a straight line, excepting for a short distance along the sea, where the wall is essentially different

at times very troublesome. The acknowledgments of the writer are also due to Mr. Gilbert as well as to Dr. Waldstein, Professor Richardson, and Mr. C. S. Brownson for many suggestions, and to Dr. Dörpfeld for valuable observations.

in construction. Neither here nor elsewhere is the line of wall even approximately straight for more than 40 m. at a stretch. The frequent changes of direction, for which often there exists no apparent reason, form a series of very obtuse angles. The right angle was not used where we might expect one. Except in the corners of the "square" towers, such an angle does not occur in the whole circuit of the city. The existing foundations of this eastern wall of the lower town rise above the surface from 0.10 m. by station *B* to one metre near *D*. They are on an average 2.6 m. thick, varying but a few centimetres either way from this measure. The slight variation is in part accounted for by the difficulty in obtaining, on the somewhat roughly dressed stones, exactly corresponding points from which to measure; so the thickness of these walls, here as at every other point where sufficient remains are extant to render measuring possible, may be considered as accurately given by the above figures. These foundations are made up by a wall of stone on either side, the space between being filled with packed earth in which are scattered small stones. The stone is fairly well dressed on the surfaces which face outward; the inner surfaces however are quite in the rough, just as they were broken from the quarry. The work is semi-polygonal, there being very rarely a right angle in the joints. Many blocks are nearly quadrangular, but others are decidedly polygonal. Much pains seems to have been taken to make the upper surface of the foundations as nearly horizontal as possible. In this respect, indeed, the walls are much like those of Mantinea. There are absolutely no remains of the superstructure scattered about. This is not difficult to explain when we consider that Eretria has always been inhabited, and has, to judge by the graves, at times been the site of a considerable town since the days of its ancient renown. Even now the village numbers some 150 buildings of various kinds. It has not been uncommon for the walls of a city to disappear under such circumstances; and even to-day the inhabitants of Eretria are in the habit of digging up the foundations of the old city-walls to obtain stone for building. But there are reasons which tend to show that the upper portions of the walls of the lower city were built of sun-dried brick. Had the superstructure been of stone, it would be remarkable indeed if, in more than a mile and a half of such walls, some fragment had not escaped to tell the character of the rest. The foundations can be traced throughout nearly their entire length; yet not a stone which can be surely ascribed to the super-

structure can be found. On the acropolis, some towers still stand to a height of 4 metres, while the wall of the citadel is in places 3 metres high. In this no attempt is made to have the first course above ground horizontal, as in the lower city. It was not uncommon for city-walls to be built of sun-dried brick, and we know that this was the material used in the walls of Mantinea. The clay for such bricks was abundant near the Eubœan city. It seems quite probable, therefore, that the portion of the place which lay in the plain was enclosed by walls of this nature. The outcropping rock of this region is limestone, but the ledges, even those in close juxtaposition, often show markedly different characteristics. All the stone used in the walls seems to have been quarried in the neighborhood. That employed in the lower city is in general of a light greyish color, little weatherworn, fine-grained, firm and hard.

The foundations of the towers, of which only slight indications are to be found in the remaining portions of the wall of the lower town, are along the eastern side intact and in excellent condition. A series of five in succession gave an excellent opportunity to learn the dimensions of their ground-plan, and the intervals at which they were probably placed along the greater extent of the defenses of the lower city; at least, nothing appears elsewhere to throw doubt upon the measurements here obtained. The average of these five gives a quadrilateral 6.6 metres in the line of the wall, by 9 metres in the perpendicular to this line. They extend across the wall and form an integral part of it, projecting about 1.5 m. within on the side next the city, and some 5 m. on the exterior side, and are placed at intervals of about 55 m. There was evidently no attempt to make the dimensions of all the towers just the same, or to place them at exactly equal intervals. The lengths (in the wall) vary from 6.4 m. to 6.8 m., the widths from 8.6 m. to 9.2 m., and the greatest distance between any two is 55.8 m., the smallest distance 54.8 m. The stonework is better in the towers than in the adjacent walls, but it retains the same polygonal character.

In this line are the foundations of two other very interesting towers. One is located at the southeast corner of the city-wall, at the southern end of the portion now under consideration. The other is 35 m. back toward our starting point. They are marked *E* and *F* on the MAP, and are circular in form, 7 m. in diameter. The wall is just tangent to the circle, and from it passages led within the towers. The stones

of these, though the portion projecting within the towers is, as usual, left undressed, are on the outside beautifully worked to the circular form, the joints being also carefully fitted. In addition, the outer surface is carefully dressed with regular horizontal rows of vertical straight lines about an inch long, the lines of the alternate rows, reckoning from the bottom, being perpendicularly over one another. This work is undoubtedly, as has been shown by Dr. Dörpfeld, an imitation in stone of the surface of the sun-dried brick. A path extends across the wall just north of the southernmost of these two towers. The shortness of the distance between them, some twenty metres less than usual, together with the unusual shape and their superior architectural beauty, can best be explained on the ground that there was here another entrance through the eastern wall of the city. The existing remains above ground are insufficient to establish this fact.

For nearly its entire length, a causeway must originally have been constructed on which to lay the foundations of this eastern wall. At the time our survey was made, it was impossible to work anywhere in this section except on a strip of land a few feet wide on either side of the line of wall. Even when we revisited the site, early in May, though the ground was elsewhere dry and the grain was almost ready for the harvest, there was still a marshy pond surrounded by a bog inside the wall; and the great marsh to the east of the line covered an area nearly as large as that occupied by the ancient city itself. It was undoubtedly this great swamp which gave the city its bad name in antiquity, and ultimately caused its depopulation. The late King Otho cherished plans for restoring the city to more than its old-time splendor by building a great naval station here. The new Eretria was duly surveyed, maps were drawn, plans made, colonists were settled. In the office of the village Demarch can still be seen on paper what magnificent boulevards, docks, public squares, fountains, and gardens were to have been called into being. But the dream of the king and the reality of to-day stand in sad contrast. The only parts of this magnificent scheme which took some material shape were three buildings that were intended for the Naval School, and the streets of the village, which impress one as being altogether too broad for the few poor houses scattered along them. The same unhealthful influences emanate from these marshes as of yore. They compelled the king to give up his scheme; and they render it unsafe for any one to remain at Eretria after the warm weather of spring has once fairly set in.

The direction of this east wall is such as, at first glance, to warrant the belief that it must have extended directly to the seashore at the point where the peninsula joins the mainland, thus including the whole of the east side of the large harbor within the ancient fortifications. But, making a sharp turn to the west at *F*, it runs in a direction less than a right angle with its previous course for a hundred metres. At *H*, it turns with an obtuse angle toward the sea again, and its course is easily followed for some 120 metres further. At *I*, it is entirely lost in the well cultivated fields lying on this side of the village.

These apparently eccentric turnings involve the surrender of all idea of fortifying the entire water front of the large harbor as it now exists. Beyond *I*, though making various turnings, the wall does not finally reach the present line of the shore till it comes to *N*. From *N* to *O*, a distance of 80 metres, the line skirts the beach. At *O*, it turns directly inland; so that the line *N-O* is the only frontage the wall now has upon the harbor. This appeared a curious state of things, and for a long time no satisfactory solution of the puzzle could be found. To be sure, the line from the round tower at *F* toward the inland end of the peninsula, led across ground which was decidedly marshy at the time the survey was made, so much so, indeed, as to preclude a careful examination of all the intervening ground. The turns at *F* and *H* also brought the line around the small pond lying outside the wall in this direction. But the engineering-skill which had run the whole eastern wall through the great swamp, and included one pond within the fortifications, would certainly not have been stopped by the lesser obstacle between *F* and the sea. Then, too, in the line *H-I* the ground is perfectly firm the whole way to the shore. The angles at *F* and *H* are quite distinct; the line of wall *F-G-H-I* is unquestioned, being among the best preserved portions of the entire circuit of the lower city. It was only when we revisited the site in May, after the summer heats had dried up the swamp to some extent, that what seems the true explanation was discovered. In the immediate neighborhood of the line *F-G-H*, all traces of a former wall have disappeared. But, moving out from *G* directly toward the sea, a wall was discovered, concealed by bushes, sometimes indistinct, sometimes as well preserved as any portion of the eastern wall, in all sufficient to show that it must have extended from near *G* and enclosed the eastern side of this small pond. The wall ends abruptly, as shown on the MAP. The pond is half enclosed, on the east by this last discovered wall, and

by the line *H-I* on the west. Between the pond and the present shoreline is an accumulation, made up apparently of sea-sand, rising to perhaps 2-3 metres above the water-level at the highest point. Mention is made by ancient writers of the two harbors of Eretria. So it seems beyond question that where this little pond now is enclosed by the two arms of the city-walls was once the innermost fortified harbor of the Eretrians. Here, as in so many other instances, the action of wind and waves has completely altered the character of the coast, and filled up the old harbor.

At *I*, as mentioned above, all trace of the wall is lost. At *L*, it again appears, and from this point throughout the remainder of the circuit, both of the lower town and of the acropolis, the main line is traceable with perfect certainty. We counted ourselves very fortunate that the study of the walls offered problems enough to render the work most interesting, and that at the same time the remains were sufficient to restore, with a good degree of certainty, the ancient lines of the city.

From *I* to *L*, there existed beyond question a wall. Between these points to-day extends a highly cultivated field. In it a few stones are scattered about, and there are remains of foundations of buildings, perhaps constructed of stones from the city-wall; but, in the main, all traces which were above the surface have been removed entirely, both because desired for building purposes, and because they formed an obstruction to tillage. In a pit near *J*, was found a short bit of well laid stone substructure; but neither the character of the work nor the direction in which it extended seemed to warrant the conclusion that it was a portion of the city-wall. The line from *I* to *L*, as laid down on the MAP, shows how the wall, which must have crossed this interval, may have run. Three facts furnish the reason for choosing this particular course. At *J* and *K* are the foundations of what in later times were certainly buildings, but which anciently may have been towers. The stones look as if they had once belonged to the city-walls. The present dimensions of these foundations are, however, not what we should expect to find in foundations for wall-towers. In the line *K-L*, we find other foundations; in one case it may be the remains of a square wall-tower, in the other is recognized, by its dimensions and the character of the work, a round tower similar to the two already described. This last, at *O*, may be said to fix the line of wall as passing this point.

The line *N-O* has qualities, peculiar to itself, such as to show that here at least the shore-line has not changed. The best measurement gives its thickness as 2.7 m. ; but it is a solid stone wall for the entire length. It appears that the action of the waves injured this line to such an extent as to render most thorough repairs necessary ; for at the end near *N* the foundations are regular quadrangular blocks of breccia 0.7 m. by 1.3 m. in area on the upper surface, showing marked traces of red oxide of iron. The outer row of these blocks is laid with the ends toward the sea. Further on toward *O*, a course of fine polygonal blocks rests upon the breccia ; and near *O* the polygonal blocks only are in sight. Breccia, so far as I am aware, appears nowhere else either in the wall or in the neighborhood, and the way in which this stone is dressed points to a later period than that of the usual polygonal wall. The tower at *O*, of fine massive polygonal masonry, is circular in form, 7.6 m. in diameter, and of a quite different and more solid aspect than that presented by the round towers mentioned already. One complete course still stands above the surface ; and the water almost touches the outer edge of the tower. In two adjacent outer stones are to be seen the only clamp-holes which were found anywhere in the walls. One is for half of a U-shaped, the other for half of a \vdash -shaped clamp. It is quite possible that these were added, for some purpose, after the destruction of the upper portion of the tower. More probably, however, they served to clamp together the stones of the tower with those on the inner end of the mole or breakwater which runs out from this point. The breakwater extends out for perhaps 20 m., then turns at an acute angle and runs to the east in a direction too near the shore to be quite parallel with the wall *NO*. It ends a little to the east of *N*, and there is no connection between this extremity and the shore. Though the entire length is beneath the surface of the water, it is even now dangerous to sail over it with an ordinary boat. The evident purpose was to form a small haven into which galleys could run and lie in safety under the protection afforded by the sea-line of wall with its strong tower. Probably the breakwater extended above the surface in antiquity, though to what height it is not possible to say. The present character and condition of the breakwater are similar to those of the much longer mole which led out from the point of land by the ruined church further to the west. This sea-wall protected and still in a measure protects the great harbor from the sweep of the west-northwest winds, which blow down the Euripos. A small islet at the

outer end has given rise to the belief that a lighthouse formerly stood there.

At the eastern end of the sea-wall *NO*, by *N*, are remains of quadrangular foundations in poros stone, 9.7 m. wide in the direction *NO*. They apparently extended originally into the water, but the outer end is now washed away. The construction and position both warrant the belief that here was an ancient wharf; consequently, here must have been one sea-gate to the city.

The wall *OPSV* calls for little additional mention. From *O* to *S*, it passes beneath two modern buildings and crosses the streets of the present village. From *S* to *V*, the portion above the surface has been removed, but there has been but little digging for foundation-stone. The indications of the wall, though not very numerous, are quite unmistakable. Lines of graves on the other side of the fields to the west, show that, as indicated on the MAP, the "Sacred Way" from this direction probably entered the city at a point not far from the Naval School buildings; but there are no indications above ground to show that a gate stood here.

Passing very near the western side of the theatre-mound, at *V*, the wall of the lower town reaches its northwestern angle. Here was a tower much larger than any of those we had hitherto discovered. Unfortunately its ruined condition rendered it impossible to take the dimensions. Immediately to the north of this tower, in the brook which runs parallel to the line *VUT*, are the remains of the stone abutments of an ancient bridge. This, though other indications are lacking, shows that there was also an entrance to the city just to the east of the tower, at a point where a road now leads out and up the valley to the north.

At *V*, the wall turns toward the acropolis. For the first 50 m., the kind of stone, the method of construction, and the width, are the same as those of the eastern wall of the lower town. The same light-colored, fine-grained, hard limestone occurs, the same semi-polygonal shapes to the stones which form the two outer shells of the wall, the same rammed earth filling, with the thickness practically constant at 2.6 metres. At this 50 m. point a change takes place. The line begins to ascend the southwestern slope of the acropolis (PLATE XIV). For some little distance the ascent is gradual, and there are so few fragments of the wall still visible that the change does not become at once apparent. A more careful examination showed that there is a line of stones ex-

tending across the wall at this point *W*, and a piece of wall leads from the main line a few feet within the city. The stones in the main wall to the east of *W* are decidedly polygonal, and are of a different quality from those previously observed. The thickness of the wall is 2.1 m. This measure is characteristic of the acropolis-wall through its entire length. In the steepest portions of the ascent it contracts to 2 m., and in one or two places, as at *b* and *f*, it is much thicker for a short distance; this extra thickness is to give the wall the strength of a tower. The filling is composed almost entirely of small stones. From *X* to *Z* the grade is 10° . At *Z* begins a fine polygonal wall some 2 m. high. From *Z* to *a*, the angle of elevation is 17° . At *a*, the line turns and goes up the steepest portion of the ascent at an angle of 25° . A view (PLATE XV) of the wall beyond *b* on the MAP gives an excellent idea of the appearance of the main acropolis-wall in its entire extent. Towers are not placed at regular intervals, but occur apparently where most necessary. From *W* to *Z*, unimportant remains of these defenses exist. Some 20 m. beyond *Z* is a tower 6.1 m. by 5 m. in area. The view given in PLATE XVI shows its great strength and the decidedly polygonal nature of the construction. The stone used is the same as the bed-rock over which the wall extends, and was apparently quarried on the spot. It is dark-grey, porous, and usually much weathered, so much so as to be exceedingly rough and unpleasant to the touch, contrasting decidedly with the stone in the walls on the plain. A comparison of PLATES XV and XVI with the polygonal walls of Lepreon in Elis, of Asea near Tripolis, of Medeia (?) in the Argolic plain, and of the well-known piece of polygonal wall on the side of the city opposite the "Treasury of Atreus," at Mykenai, shows that, so far as appearances go, the oldest portion of the acropolis-wall of Eretria displays a more decidedly polygonal character, and hence, in accordance with the old-time view, should be of a higher antiquity than any of these. Though no one would claim to-day that this appearance of hoary age shows of itself that these walls were constructed at any particular period before the Christian era, still, when taken in connection with other facts to be noted later, the comparison affords a strong presumption that the Eretrian acropolis was fortified at an early date.

Between *a* and *b*, when the summit is nearly reached, two walls branching from the main line claim attention. The one which crosses the southern portion of the summit till it joins the eastern wall of the acropolis, will be discussed further on. Just beyond where this leaves

the western line is a fine tower of polygonal masonry, 4 m. by 6 m., its outer wall still being at least 4 m. high. From immediately above the tower, the branch-wall starts down the slope to the left, at an angle of 11° . Just beyond this wall is the first gate of the acropolis. It is small, only 1.6 m. wide; but the lower courses are in excellent preservation; there is thus no doubt that this was the original width. The branch-wall appears, so far as the ruins will admit of decision, to be of the same nature as the main acropolis-wall *ab*, and was probably built at the same time. Rather more than a third of the way down the hillside it terminates in a tower at *I*. After a short break, there comes the tower *II*. From this point on, a diligent search failed to lead to the discovery of any further traces of the wall, though many stones which have fallen from the upper line are scattered over the ground. The first thought was that this lower wall was constructed to include springs for the citadel fortifications; but no traces of springs were found in the space thus added. After a study of the northeast entrance to the acropolis, a close examination showed that the main purpose here was probably to form a double line of defense for the entrance to the citadel from this direction, and at the same time to add to the area of the acropolis. The main wall from *b* to *d* is along the summit of a precipitous declivity, the bare rock sometimes falling 10–12 metres sheer. The branch-wall from the gate to *I* is also along the edge of a steeper portion of the hillside. Directly below the tower *II* are indications that a roadway, passing close below this tower and on between *I* and *II*, was formerly supported by a retaining-wall. This to be sure would present, to the defenders of the tower, the "shield side" of an enemy passing along this road; but the lay of the land did not allow of any other arrangement. The slope, both down the hill without and from within up to the gateway at *b*, is such that a roadway here would have been quite practicable.

The main purpose for which this wall was constructed being accomplished at the gate-towers *I* and *II*, it is natural to expect that from *II* the line should pass as quickly as possible back to the main wall. Though there is nothing in the space between to prove or disprove this, at *d* there are slight indications that the wall may have returned straight up the steep slope to this point. It is accordingly so shown on the MAP. The line *deg* passes along the northern edge of the summit. So sharp is the fall that a substructure of smaller stones, a little outside and below the real foundations, was deemed necessary along

the entire distance, *d-g*. The summit of the hill has been leveled, so that the existing remains of the encircling wall serve as a terrace-wall to support the earth, and they seldom project more than half a metre above the level of the soil within. The most imposing view of the summit must have been from the north. Here, no portion could have been more impressive than the walls of the great tower at *e*. Its dimensions are 9.8 m. by 7.8 m., while two cross-walls divide it within into four parts. Its northern wall is still 4.8 m. high, and it is constructed of regular courses, each 0.6 m. thick. The stones are not exactly rectangular, the vertical joints not being in all cases perpendicular; but it needs only a glance at PLATE XVII to show that this has nothing constructionally in common with the main acropolis-wall as seen in the previous views. If further proof were needed, it is found in the fact that this tower is simply built against the wall. The wall, intact and as complete as elsewhere, runs behind the tower, the stones of the latter being merely laid close up to those of the wall. Stones similar in appearance and in material to those used here are found only in the two towers by the gate at *h*, and in the other similar tower at *k*. The shape of the stones used varies considerably in these four towers. The method of working is the same, even to a finished edge extending the entire length of the corners of the towers. This last peculiarity is found only in these four towers. These four structures, then, must be taken as representing a particular period of construction and repairs.

The tower at *g*, 4.5 by 6 m., though forming a part of the old wall, deserves special mention. Outside of and below it are two lines of terrace-wall. The slope here is not steep enough to require such supports, and the walls are too far from the tower to serve to strengthen its foundations. The more probable explanation is that at some time a path led up the slope, rounded the western end of the lower terrace-wall, passed between the two, turned the eastern end of the upper one and then proceeded, between the tower and the upper wall, to the west side of the tower, where there was a small entrance. A passage through the inner wall of the tower is still easily distinguished. The line for the greater part of the distance from *f* to *g* was strengthened by walls situated, the first 1.5 m. from the main wall, the second 1 m. further in, which look as if they may also have had the purpose of supporting a passage to the ramparts.

Between *g* and the northeast corner of *h*, the wall has been patched, in part with finely worked blocks of poros stone, one of them with a

side a perfect rectangle 1.4×0.8 m. in area. These stones are different from any found elsewhere in the walls. This corner at *h* was naturally the weakest spot in the fortifications of the citadel. Here to the northeast is the highest portion of that ridge which connects the solitary outlying spur, which the Eretrians used for their acropolis, with the remaining foot-hills, offshoots of the Eubœan Olympos. Along this ridge must have come that road which entered the acropolis between the gate-towers. Here an enemy would naturally attack, and here we accordingly find plentiful evidences of rebuilding and repairing.

The line *fgh* terminates in a fine tower (PLATE XVIII) projecting 4.9 m. in the direction *gh*, and 8.7 m. wide. Beyond the tower, in a continuation of the line *gh*, is a passage about 6 m. wide, beyond which again projects, to a distance of 10.2 m., another tower, which is 13 m. wide. The upper, the first mentioned of the two, is now 2.7 m. high, the lower tower 3 m. high, measured on the down-hill side in each case; while the up-hill sides are on a level with the earth at these points. Here, also, the upper tower is plainly an addition to the older wall; but a study of the lower easternmost one gives striking testimony that both these structures were an afterthought. About 45 m. from *h* in the line *hk*, the line *kh* divides, one branch going to *h* at the upper, the other to the lower of the two gate-towers. The two branches are apparently coincident in their time of building, and a small tower guards the point of junction. They are of the same construction as the main line of the acropolis-wall. Just before reaching its tower, the lower branch makes a curious curve, as if to pass around it instead of joining it directly. There is no appearance on the tower to indicate that the wall ever touched it. Unfortunately, from the point two or three metres from the tower, where the curve begins, the height of the wall falls away. Where it passes near the lower corner of the tower, only the points of the stones of the foundations project above the surface. This line is traceable completely around the lower side of this tower, up to, and across, the passage between the two towers. This is indicated by the dotted line on the MAP. There is not room enough between the lower tower and the dotted lines to admit of a passage. The dotted line across the entrance between the two towers cannot possibly represent the remains of a wall extending across this space after the time of the building of these two towers. Such a wall would render this entrance to the acropolis useless. This dotted line, then, stands for what can still be seen of the fortifications which were here

before these towers existed. When these earlier defenses had been destroyed, or were for some reason thought to be too weak for so important a line of defense, they were replaced by the existing towers. Naturally, the lower branch-wall must have joined the lower tower to make the line of defense complete. As no signs of a more intimate union exist, it seems that the wall must have been merely built up against the tower. By what sort of gate the entrance between the two towers was closed does not appear. The holes at comparatively regular intervals under the top course of stones of the upper tower appear, from a comparison with other parts of the same structure, to have been formed by the removal of the small stones used to fill up the openings due to the polygonal shape of the larger blocks. Some 37 m. from *h*, 8 m. from the dividing-point of the two branches, is found one side of the gateway leading within the acropolis itself. It is not possible to make out the width of this entrance. The existing portion has the same appearance as the sides of the gateway at *b*, on the west of the hill. From *h* to *k*, there are in the wall a few traces of patching in which lime-mortar appears for the first time. At *k*, is the last of the four great acropolis-towers, 9.8 m. by 7 m. in area. It is more massive than the other three, one corner-stone being 1 m. \times 1 m. \times 0.46 m. The wall here extends across the tower, which must therefore have been a later addition to the fortifications.

At the point *f*, the descent of the acropolis along the line of the wall begins. The slope is gradual from this point to *k*. From *k* to our starting-point at *A*, the angle of the slope is 17° , and the line runs obliquely down the hillside. The extant portions for a part of this distance are scanty but sufficient to determine the wall. Up to the point *p*, wherever measurable, the thickness is about 2.10 m. and the usual wall-characteristics of the acropolis-wall appear. Just beyond *p*, where measurement and accurate observation are again possible, the width is 2.6 m. and the appearance is that of the wall of the lower city.

The cross-wall along the southern edge of the acropolis next claims attention. Starting at *l*, on the west side of the acropolis, are the remains of two walls some 7 m. distant from each other. The ends are merely built against the main line at this point. The lower of these extends only a few metres, and is of as venerable appearance as the walls of Tiryns. The upper one is the beginning of the real cross-wall. Through the latter, a short distance from the beginning, is a passage 1.8 m. wide. Foundation-stones across the bottom of the pas-

sage, some 8 to 10 cm. high, forbid the idea that in antiquity this could have led through the wall at the same level as the surface of to-day. It seems more probable that the lower wall just mentioned supported a terrace, so that the pedestrian could pass through the cross-wall to this terrace at a higher level than at present, turn to the left, pass round the end of the retaining-wall, and then, bearing to the right, follow the foot-path that to-day as of yore leads down the steep descent by the line of wall *b-a*.

The southern declivity of the citadel is so steep, at times indeed absolutely precipitous, as to render even a good foot-path connecting the upper and lower towers practically impossible excepting at this place, and at *3* and *7* to the east. This cross-wall is of exceedingly poor construction, made of small stones held together by large quantities of lime-mortar, and is but 1.7 m. thick. These characteristics caused us to give it the name of the "Roman cross-wall." It passes along the southern edge of the summit to *2*, then turns downward at an angle of depression of 17° to run along the top of some beetling rocks at *4*. At *5*, it divides into two branches, one running northeast at about the same level and meeting the main line at *8*, the other bending down a steep descent around the summit of another precipitous rock at *6* to the gateway at *7*, beyond which it also joins the eastern acropolis-wall.

Though the descent from *3* is very steep, a foot-path is practicable. Halfway down are the ruins of what may have been a kind of propylaea, and below there are steps cut in the solid rock as if leading up to this point. The main entrance to the acropolis, however, from the city itself, the only one in fact in the least degree practicable for horses, must have led up through the gateway at *7*. The southeastern slope is quite gradual; and the triangle formed by the three walls within *7* has plainly been artificially leveled. Above the inner line of wall *5-8*, and from *8* along the main line back beyond *k*, there has also been much work of this kind. At *k*, indeed, the earth within is some 4-6 metres above that immediately without the wall. The line *5-8* is in such a ruined state that it is now impossible to say where the road passed through it; but it seems, from the nature of the slope, that this gateway must have been near the end at *8*. From *2*, in the line of the Roman cross-wall, are traces of a wall leading toward *8*, but the purpose of this was not determined.

Disregarding such appearances as the ancient part below the "Roman cross-wall" at *1*, the repairs with well squared stones near *h*, and the

rebuilding of the sea-line *NO*, four great periods of wall-building are clearly distinguishable at Eretria. In the order of apparent antiquity must be named : *first*, the main line of the acropolis-wall ; *second*, the wall of the lower city ; *third*, the four great towers at *e*, *h*, and *k* ; *fourth*, the so-called " Roman cross-wall." Concerning the last three divisions, there can be no doubt, though by such a classification there is no intention of asserting that the four great towers, for instance, were all erected within any short definite period of time, as a single year. It is maintained only that they belong to the same period of construction. Our assigning two separate periods somewhat remote from each other for the construction of the acropolis-wall and of that encircling the lower city is so important, in view of what is to come, that it is best to recapitulate the arguments.

The acropolis-wall seems to have been entirely of stone ; the upper portion of the wall of the lower city was apparently of brick. The acropolis-wall is markedly polygonal in character ; the wall of the lower city much less so. The stone used in the construction of the two lines is in general quite different in material and appearance. Where observable, the filling of the wall in the lower city is rammed earth ; on the acropolis it is largely composed of stones. The thickness of the lower wall varies but slightly from 2.6 m. ; in the upper city the thickness of 2.1 m. is about constant. The points at which the changes in construction occur, are fixed with a good degree of precision at *W*, on the west, and *p* on the east. These indications first suggested the thought that, as in the case of Athens and of most Greek cities before the time of the Persian wars, the citadel of Eretria was first fortified ; and only at a period considerably later was the city which had grown up on the plain thus protected. If this was so, there must have been a wall across the south slope of the acropolis long before the present late " Roman wall " was thought of.

Search for the foundations of such a line did not receive so full a reward as could have been desired. This southern slope of the citadel has at first a gradual ascent, and the ruins on its lower portion are the most exposed to the depredations of the villagers seeking for building-stone. A small quarry has in fact been opened here ; but this was not done till the greater portion of the loose building-material had been removed. Higher up on the slope, as indicated by the crosses on the map, considerable remains of terrace-walls and parts of the foundations of buildings are still found. The line of the streets, even on the

steep hillside, can sometimes be traced for a short distance. These remains are, almost without exception, of the same material and character as those of the old main line of the acropolis-wall. Such remains are not found below the dotted line, which marks the presumable course of the lower wall of the ancient citadel. The number of fragments of wall scattered over the hillside rendered the tracing of this line exceedingly difficult. Nowhere, indeed, were foundations discovered so that the width of the wall could be measured. Starting at *p* on the east side, just where the change in the width and character of the wall takes place, a line of stones at short intervals leads across a grain-field toward the west. These indications were followed carefully, the line being staked at intervals. In one spot the bed-rock had evidently been hewn out to receive the lower courses of the wall. Portions of foundations of what seemed to be towers appeared occasionally; other fragments of wall kept lining in, till finally all indications pointed toward *W* on the west side as the terminus of this lower wall. In other words, this cross-wall rejoins the acropolis line at the west exactly where it was to be expected. Of the many fragments lying higher up the hill, so far as careful study has shown, none will line in with such a wall as is required here. This wall as laid down on the MAP includes within the ancient citadel the most ancient foundations of the city. It stretches across a short distance above the foot of the declivity. The peculiar long projection of these acropolis-fortifications toward the west is also accounted for. Just outside the line *WX*, is a sharp break, a sudden descent, rendering the line of wall easy of defense. The extension of this ancient city so far to the west included practically the whole of the southern slope of the hill within the walls, and brought the western limit within a short distance of the little brook which is the only abundant source of running water. No claim of absolute demonstration for this cross-line of wall is put forth,—the extant remains are too scanty for that; but, in the light of the facts presented, its existence may fairly be said to be in the highest degree probable.

On the very summit of the acropolis, some well dressed poros blocks have been excavated, but not sufficient evidence has as yet appeared to show the character of the structure to which they belonged. Unimportant remains are also visible in other portions of the citadel. Along the road leading into the town from the east at *A*, the somewhat extensive excavations carried on by the Greeks for the purpose

of procuring earth with which to fill up the great swamp, have brought to light extensive foundations, apparently belonging to stoas and similar public buildings. Some ruins of the same nature have been uncovered to the east, along this same road, outside the walls. Near the line *VW*, and in the bushy ground south of the theatre, many foundations are to be seen also, the course of some of the narrow streets being traceable. Fragments of walls just coming to the surface are occasionally found in the streets and plots of the modern village; but there seems to be little of promise for the excavator's spade.

No attempt has been made on the map to show the number and arrangement of the graves beside the "Sacred Way" and on the point by the land-end of the large breakwater; it has merely been sought to indicate the places in which the graves are found. The tombs along the great highway leading toward the east are in great numbers, and the lines extend for a considerable distance back from the road on either side. No graves have been found within the walls. On the western side of the acropolis, without the walls, are the ruins of a small church. These are interesting, because here was found, a few years ago, an inscription relating to Dionysos. Other wrought stones have been found on this hillside; notable among these is a well made door-sill.

In view of the statements of distances found in classical authors, it was interesting to discover that the width from the sea-wall at *N* to the *Scala* of *Oropos*, on the opposite shore of the Euripos, is 7687.37 m., or about 4.8 English miles. Measurement of the distance to the Delphinion gave 9679.43 m., or 6 English miles. The latter figures are less trustworthy, however, because of the impossibility of locating exactly from Eretria the position of this ancient harbor.

Situated on the northern shore of the broad Euripos, which here presents the appearance of an inland sea, with such fine harbor advantages as were evidently hers, it is easy to understand the ancient maritime power of Eretria. To-day the great harbor has a water-front, reckoned from the point by the ruined church on the west to the inland end of the peninsula on the east, of but little less than a mile. Nothing but the unwholesomeness of the air stands in the way of Eretria becoming again one of the most prosperous ports in Greece. The peninsula, which, as has been said, is now at some tides entirely surrounded by water, has upon it unimportant remains of walls, particularly on the inland end and on the east side. These remains, at first thought to be of high antiquity, were proven by the use of mortar in their construc-

tion to be comparatively modern. This peninsula, in the lapse of time, has suffered very severely from the action of the waves. Exposed as it is to the sweep of the prevailing winds up and down the strait, the outer end has been worn away for a long distance, as may be seen by the reef projecting here. This process of destruction is indeed still going on; and owing to the large area which has thus been washed away we cannot say how extensively this land may have been utilized in antiquity.

The plain on which the town was built, extending several miles along the shore, is very fertile, and is seldom more than three or four metres above sea-level. To an observer, either from the deck of a passing steamer or from the high ground of the opposite shore, it easily becomes apparent why the Eretrians of old chose this for the site of their city. Nowhere along the stretch of coast does there appear another such elevation for a citadel. The circuit of the outer wall of the lower town and acropolis is about $2\frac{1}{2}$ miles, which of itself would show that this was indeed "no mean city."

It was our good fortune to be busied with this survey in those days of early March when the snowstorm had cleared away, to be followed by many days of cloudless beauty. From the top of the acropolis, 116 m., high, we looked down on the plain and the town. On one side the workmen were busy at the theatre excavations; out on the plain to the east, others were opening tombs; just beyond the town stretched the winding course of the Euripos with occasionally a passing sail. The snow had scarcely melted when thousands of bright anemones scattered themselves over the fields. The eye wandered from these nearer scenes, attracted by the wonderful beauty of the mountains still clad with snow. A little north of west the sharp, white, perfect cone of Messapion rose. Further southward, in the distance, towered lofty Parnassos; then came Kithairon. To the south, Parnes shut out the view of Pentelikon. To the southeast appeared Ocha and the mountains of southern Euboia. Close beside us, to the east and north, was the snowy range of Olympos. Day by day the snow-line climbed higher, and the valley became more green. The contrasts of these snow-caps and the verdure, the wide extent of sea and plain and mountain, as seen through the clear air of Greece under the soft purplish glow of a Greek sunset, made a picture of rare beauty, such as one seldom looks upon, but never forgets when once seen.

JOHN PICKARD.

EXCAVATIONS BY THE AMERICAN SCHOOL AT PLATAIA IN 1891.

DISCOVERY OF A TEMPLE OF ARCHAIC PLAN.

[PLATES XX, XXI.]

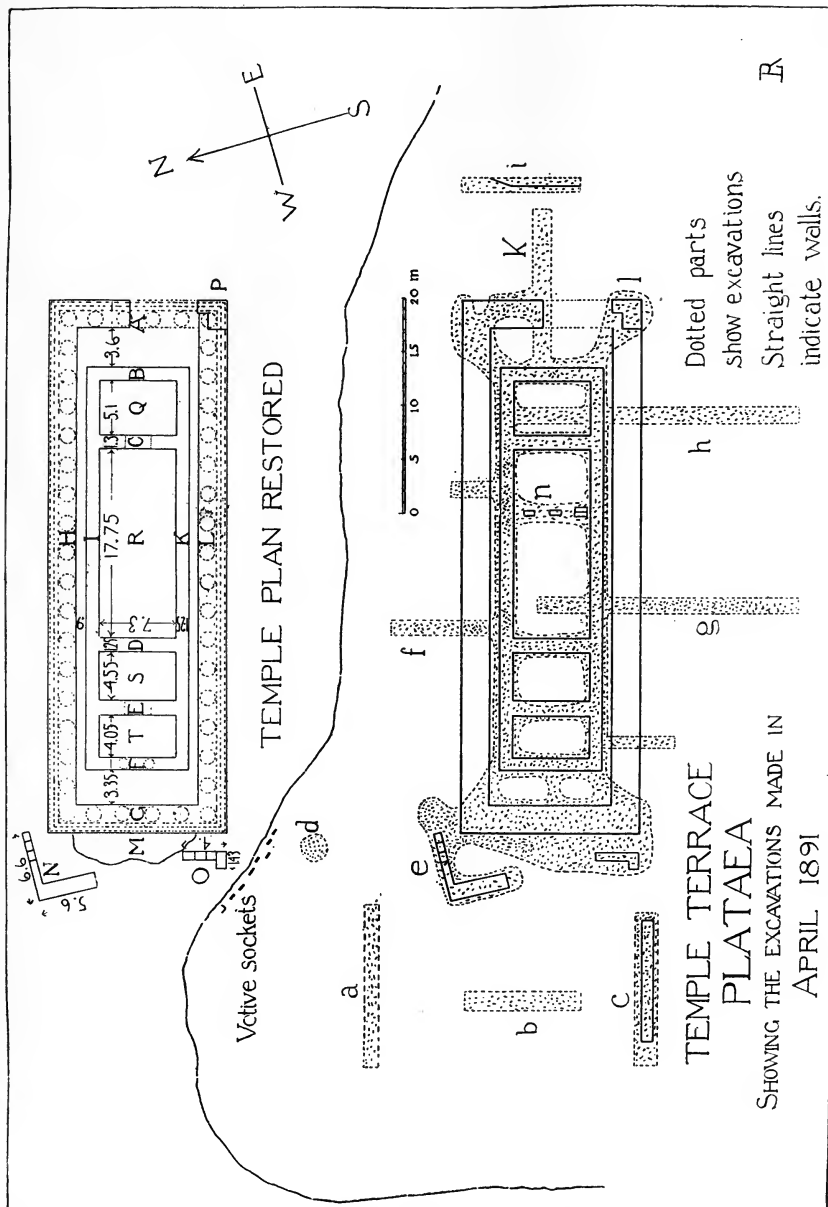
In presenting Mr. Washington's report for publication, I wish to state that with the work of this third season our excavations on the site of Plataia will be suspended for the present. It is a matter of considerable gratification, that, owing to the intelligent enthusiasm and perseverance of Mr. Washington, we have now discovered one interesting and important edifice of the ancient city, of which so few vestiges remain, and are able to identify this with approximate certainty as the Heraion.

Mr. F. C. Penrose has read Mr. Washington's paper in the manuscript, and has made some valuable suggestions.

CHARLES WALDSTEIN.

Work was begun, on April 20, 1891, with sixteen men, at a point in the plain about 500 metres north of the plateau, and on the west side of the Thebes-Alopétrypi road, where lie some cut and squared stones. Part of a day was spent here with no great result, the roughly cut blocks of coarse, gray marble having seemingly formed a platform or base, but being now too much scattered to determine the dimensions. Water was met with 0.80 m. down, and the digging was shifted to a square platform, made of cut blocks of the same stone as the preceding. This lies at a distance of 300 m. N. N. E. of the ruined building marked "*Ruin*," north of *W* on the map of Plataia drawn by the School last year.¹ A day was spent in digging round it, resulting in the discovery of a clay lamp and two or three coarse unglazed red vases of Byzantine period, as well as two shallow graves, apparently also Byzantine. These were floored with large square tiles, but,

¹ *AJA*, vol. VI, PLATE XXIII.



unlike most Byzantine graves, had no side or top stones, the body (one in each grave) having been simply laid in a shallow hole with a tiled bottom.

The dimensions of the platform, which is square and oriented exactly north and south, are as follows: diameter, each way, 3.80 m., height 1.45 m.; it is composed of three courses of squared blocks, nine in each, every block measuring 1.25 m. square and 0.45 m. deep, the lowest course projecting a couple of centimetres all around. The blocks are fairly shaped, but roughly finished, laid together without clamps or mortar, the whole being evidently a foundation for some monument. At a distance of 8 m. to both north and south a rough wall of smaller squared stones was found, running east and west. Trenches were sunk inside the supposed enclosure, but with no result, except the finding of the graves and pottery above mentioned, all of which are of a later date than the two outer walls or the platform. The ground was very heavy, as is usually the case at this season in the plain, and, the water-sheet having been reached at a depth of less than 1.50 m., the work here was discontinued. Small diggings were also made at two or three other points to the north, uncovering some blocks, apparently parts of a similar base, but very much broken up. A plain sarcophagus-lid of gray marble was found a short distance to the north of the large base, and another lies on the slope of the plateau, below the point *W* (see map of last year's report) of the wall, while in the field north of the "*Ruin*" there lies a square stone with a slot cut to receive a stele.

As will be seen on referring to the map of Plataia,² there is between *V* and *W* a long stretch without remains of walls; and in this a small rivulet runs down to the north at the bottom of the shallow valley. The road, marked *Alopétrypi Road*, branches a short distance to the north of the excavations, the easterly branch going to the small hamlet of Alopétrypi, while the westerly branch keeps on to the north and joins the main road from Kokla to Thebes a few miles further on.

These three facts: the presence of a line of bases, apparently of funereal monuments, together with sarcophagus-covers, the existence of a road to Thebes at the present day along them, and the shallow valley toward which the line of bases runs, with a gentle slope, giving easy access to the plateau, point to this line as that of the ancient

² *AJA*, loc. cit. The rivulet has unfortunately been omitted.

road to Thebes, along which the 212 Platæans proceeded on their escape from the city during the siege.³

Half a day was spent in sinking two long trenches, running north and south, on the summit of the ridges between the two brooks, inside the north wall, east of the point *W*. Virgin soil was struck at a depth of one metre, but no ancient remains were found, with the exception of a few fragments of Roman glass. Work was begun next day at *Church I*, three long trenches being dug to the south and east of it. Large quantities of broken pottery and tile-fragments were met with, but nothing of importance; and, after a whole day had been spent in sinking the trenches to a depth of two metres, the spot was abandoned.

On April 23, work was begun on the small terrace to the south of the so-called *Votive Cuttings*.⁴ A plan of this small terrace is given in PLATE XX, the trenches and excavated portions being shaded with dots. This terrace, about 30–40 metres broad and from 1.50 to 2 m. above the fields, runs like a shelf from a little to the west of the excavated site to the vicinity of the east wall; it is bounded on the south by the very rocky, and slightly higher and rising ground of the plateau proper, where the underlying rock occasionally protrudes through the soil. Along the edge of this I found hewn wall-blocks, some fallen below the terrace and others almost *in situ*. The wall which they formed belonged apparently to what was called in last year's Report the second period of Plateæan walls.

A few words may be useful to describe the position of this wall, which, unfortunately, cannot be added to the PLAN. The first blocks occur a little to the east of the votive sockets, and from that point on they are found at intervals on the edge or on the slope of the terrace, running a little south of east. A line of blocks, fallen over but still maintaining their relative positions, runs in a curve around the upper edge of the small hollow, the supposed theatre site,⁵ then, a few paces further east, crosses the Kriekouki road, and finally is lost among the rocks. From the round tower at *E'* traces of a wall run a short distance to the west, presumably part of the wall just described.

³ THUCYDIDES, III. 24.

⁴ See MAP, *loc. cit.* There are sockets or slots cut in the rock at the edge of the terrace, as shown in the accompanying PLAN, PLATE XX. They are seven in number, and measure on an average 0.30×0.10 m., and 0.05 to 0.10 m. deep.

⁵ A well built wall was found below this hollow, to the north, running east and west, and may be one of the foundation-walls of the *skene*.

Two trenches, *g* and *h* (PLAN), were sunk running north and south across the terrace, and, after half an hour of work a wall of poros stone (*K* in *Temple Plan restored*, PLATE XX) was laid bare in each of them, a few centimetres below the surface. PLATE XXI.1 gives wall *K* looking east, and shows the longitudinally arranged blocks, and one block of the course placed transversely. Half a dozen men who were at work near the north edge of the plateau (a little to the east of *Church II* in the MAP published last year), where one of my workmen said that, some years before, he had seen some "yellow columns,"⁶ were summoned to the task of following out the walls we had just discovered, and of sinking additional trenches. In this work about four days were spent. As is shown on the PLAN, the interior and cross-walls were laid bare over their whole extent, the outer wall being cut by trenches at intervals and thoroughly cleared at the corners.

To describe the excavations we will begin at the west and leave the main building till the last. Two long trenches (*a* and *c*) were sunk east and west, and another (*b*) between them, running north. In the trenches *b* and *a*, the rock surface was met with 0.20–0.40 m. down, and nothing was found except a few pieces of squared poros. In trench *c*, a kind of shelf was uncovered, running almost exactly east and west, in a line with the wall *K* of the main building, and distant from it 8 metres. It is 13.50 m. long, about 1 m. wide, and 0.35 m. high, cut very roughly out of the rock, ending indeterminately in the rock at either end as well as on the southern side, and finished off on top with coarse red tiles. Its purpose is unknown; but, judging from the tiles, it must be, at the earliest, of Roman date.

At the northwest corner of the main building, a small wall (*N*) was uncovered. It forms a right angle, and as shown in the PLAN is not oriented like the other walls. The eastern arm measures 6.60×0.80 m., and the southern 5.60×1.40 m. (exterior). Only three blocks of the original structure were found *in situ*, at the east end, where they have a total length of 0.90 m., and are 0.60 m. wide and 0.35 m. high. The rest of the original wall is easily traced by the flat, shallow groove cut in the native rock for the reception of the wall-blocks. Two

⁶ Part of a Roman unfluted column, of white marble, was found half exposed. I unfortunately neglected to measure it, but judge that its diameter is about 0.40 m., and its remaining length 1.70 m. Some Roman building will probably be found at or near this point. Part of a similar column lies south of *Church III*.

or three other blocks were found at the east end of this wall, perhaps *in situ* and intended as bases, but not connected with *N*. A similar, though smaller wall (*O*) was found at the southwest angle, the blocks composing the lowest course being still *in situ*. The northern arm measures 4 m. \times 0.70 m., while the western arm is only 1.43 \times 0.90 m. (exterior). Both these walls may be the foundations for some superstructure, such as inscribed slabs or steles.

Trenches, *d*, *f*, were sunk to the north of the large building, but with no result, the rock lying very close to the surface and occasionally cropping out. The original trenches, *g*, *h*, were also carried down to bed-rock, but nothing was found in them outside the wall *L*. The trenches *i*, *k*, to the east, also proved of very slight importance, the only thing found in them being a water-conduit in *i*, made of L-shaped terracotta drain-tiles, 0.58 m. long, 0.22 m. wide, and 0.19 m. high, joined apparently without cement. They are of exactly the same shape and dimensions as the drain-tiles discovered last year at *Church V*. The drain was laid on the surface of the rock, had no cover and was in a much broken condition when found. The total length uncovered was 6 metres; *i. e.*, 10 tiles. It ran down due north, then bent about 10° to the east, but was not followed up when it passed out of the straight trench.

The inner walls of the large building were all laid bare, so as to determine the plan with certainty, and the trenches were, in almost all cases, both here and in the other excavations, carried to bed-rock. Apart from the main walls, very little of interest was found, though quite a number of small objects were brought to light. Numerous fragments of bronze were met with, chiefly inside the building toward the west, and also near the southwest corner, just outside the wall *L*. This bronze was in the shape of roughly made rings, long helices of wire (the diameter of the wire being 0.005–0.001 m.), a few simple fibulae, and parts of two bowls; one consisted merely of a few fragments, while the other was almost entire, but was very much corroded and had been badly flattened out of shape. It was of very thin sheet-metal (about 0.002 m. thick) and ornamented in *repoussé* with narrow flutings radiating from a circle at the bottom up the sides. When perfect it may have been 0.15 m. in diameter and 0.06 m. deep. At various depths were found the following terracottas: a small figure of a seated woman, a veil over her head, but the features almost indistinguishable (0.10 m. high), of very simple workmanship, similar to

many found on the Acropolis and elsewhere ; parts of two horses (?) of archaic type (like those found at Tiryns and Mykenai), one fragment showing traces of painting ; and over thirty lenticular clay spinning-whorls, 0.05 m. across. The figurine was found near the N. E. angle, the horse fragments, one near the S. W., the other near the N. E. angle, and the whorls along the wall *C*. A few beads, fragments of glass, a small copper coin of Licinius (307 A. D.), and a piece apparently of a human jaw-bone, were also met with, the last at a depth of over a metre at the N. E. angle. Inside the building and along the outside of the wall *H*, we came upon a layer of blackened earth, a few centimetres thick, and lying on the rock. Fragments of coarse, red, unglazed pottery were met with in this layer, but no bronze.

All the remaining walls, with the exception of the blocks composing *N* and *O* (which are of a coarse gray conglomerate marble), are built of smoothly cut blocks of poros⁷ stone. This is a very soft, nearly white, friable, finely grained limestone, apparently deposited from water, and resembling some of the Roman travertine. Though almost chalky and readily scratched with the finger-nail on a fresh surface, it hardens very decidedly on exposure to the air, darkening considerably and becoming a dirty yellow.⁸

The main axis of the building lies E. 10° S. (magnetic) ; its total exterior length is 49.90 m. ; its exterior width, 16.70 m.

The outer wall, *AHGL*, 2.55 m. wide, is built of smoothly cut blocks, 2.55 m. long, 1.20 m. wide, and 0.40 m. high, laid without clamps or mortar, and fitted so closely that on the upper surface it is difficult to distinguish the joints. The lowest course rests on the bed-rock, a very shallow, flat trench having been cut for its reception. The greatest

⁷ There is great lack of definiteness in the use of the word *poros*, which is made to include almost all soft, light-colored stones, not palpably marble or hard limestone. In the majority of cases it is a sort of travertine, again a shell-conglomerate, and occasionally a sandstone or some decomposed rock, containing serpentine or other hydrated minerals. Mr. ERNEST GARDNER, in the *Journal of Hellenic Studies* for 1890 (p. 263 note), speaks of this indefiniteness. Some proper understanding should be arrived at on the subject, and the different kinds better discriminated, as in some cases the differences are important. Cf. NEUMANN and PARTSCH, *Phys. Geog. Griech.*, p. 261 and note 1 ; LEPSIUS, *Griech. Marmorstudien*, p. 117.

⁸ Chemical tests showed the presence of small quantities of iron, which gives the color, and also some alumina and magnesia, but it is nearly pure calcium carbonate, in the form of aragonite. This poros probably comes from a ridge, which runs down to the north from Mt. Kithairon, about 1½ mile east of the plateau, and on which stands the chapel of Synalipsi (*sic*).

number of courses *in situ* at any point is four, at the N. E. angle, where bed-rock was struck at a depth of 1.65 m.; while of the south wall, *L*, only two courses are left, and of the north, *H*, only one. Of the east wall, *A*, there remains only a length of 7.30 m. At the southeast corner, an L-shaped block of gray marble,⁹ *P*, was found *in situ*, resting on the poros foundation. It measures 2.75×2.70 m. and is 0.36 m. thick. The two outer faces are cut with a slight step, while the four inner ones are smoothed at the upper edge, and cut in rather deeply and roughly below. On the top, which is quite smooth, at three of the four inside edges are six I-shaped holes for I-clamps, in pairs. They are 0.16 m. long (the crossbar 0.07 m.), 0.015 m. wide, and 0.05 m. deep. The outer faces of this block are flush with the poros wall below it. At the northwest corner was found, not *in situ*, a block of an upper course of the crepidoma, showing the face of one of the steps; the block is of gray marble, 0.50 m. long, 0.40 m. wide, and 0.32 m. high, broken in all three directions, so that these figures merely approximate the original size. The bottom is quite smooth, and the outer face shows the three bands, so common at the bottom of the vertical face of the steps of a crepidoma. These bands measure respectively, .035 m., .038 m. and .052 m., beginning from the bottom, and each is at back .004 m. from the one above it. The platform *M*, at the west end, measuring 11.30×2.25 m., is constructed of poros blocks similar to those of the outer foundation-wall, and is apparently of the same period. It is much shattered at the edges, and it is difficult to determine its former extent.

The inner walls, *B*, *C*, *D*, *E*, *F*, *K*, *I*, are all 1.25 m. wide, except *C*, which is 1.30 m. They are built of blocks 1.25 m. long, 0.55–0.65 m. wide, and 0.40 m. high, these blocks being in alternate courses laid longitudinally and transversely (headers and stretchers), closely fitted without clamps or mortar. On the inner end of one of the transverse blocks of the wall *K*, is cut a mason's mark, *E*, at the upper edge of the stone. The blocks shown at *n*, as found in chamber *R*, are of poros stone and from inner walls, but not *in situ*. All the space between the walls is filled with earth containing some stones. The dimensions of the various divisions are given in the PLAN, and

⁹ This marble, the material of the blocks at *N* and *O*, and very generally used at Plataia, was quarried from the slopes of Mt. Kithairon, or perhaps on the plateau itself, though no signs of a quarry have been found. It is of a dark-gray color, sub-crystalline, rather coarse-grained, and generally of a conglomerate structure.

so need not be set forth here.¹⁰ A small fragment of a Doric column of poros, about 0.275 m. in diameter, was found on the surface.

All the remains found have now been described, and we have to reconstruct the temple as far as possible, and to determine its age and the divinity to whom it was dedicated.¹¹ We are greatly hampered by the fact that, with the exception of two fragments of the crepidoma, only foundation-walls are left, not a piece of marble or any part of the upper structure having been found near the spot.

The ground-plan shows that we have to deal with a peripteral

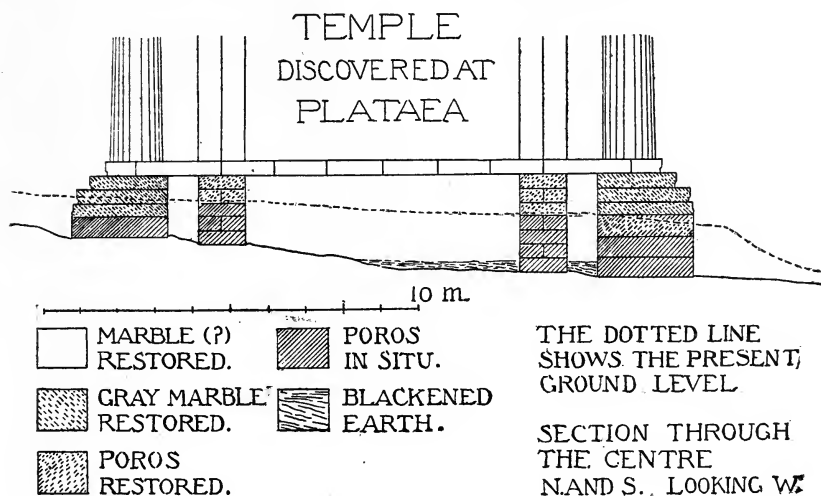


FIGURE 6.

temple, presumably, indeed certainly, Doric. The stereobate¹² is readily restored from similar buildings, and may safely be set down as having had three courses of steps, resting on a lower course of gray marble, of which the block *P* is the only extant fragment. The setback of the first step from the edge of the bottom course may be esti-

¹⁰ Fragments of roofing-tiles are scattered over the terrace. They are of baked clay, covered with a dull yellowish-gray glaze and of a Δ shape, the angle very obtuse. A small square projection for fastening is seen on some pieces, but not enough is left of any one to give the dimensions.

¹¹ The writer wishes to record his thanks to Dr. WILHELM DÖRPFELD and Professor FRANK B. TARBELL for their valuable suggestions and assistance.

¹² See section, *Figure 6*.

mated at 0.10 m., and that of the two upper steps from those below at 0.40 m., giving a top surface to the stylobate of 1.65 m. Allowing 0.15 m. on each side, we get a column-diameter of 1.35 m. (about the size of the columns of the Heraion at Olympia). This gives us a distance of 13.30 m. from centre to centre of the angle-columns on the ends, and 46.50 m. on the flanks. Eight columns at the end would give an average intercolumniation of 1.85 m., which is much too narrow, as it would leave only 0.20 m. between the columns; so we may be assured that the temple was hexastyle, with an average intercolumniation on the fronts of 2.66 m. Placing the two angle-columns nearer to their neighbors than the others by 0.25–0.30 m., the usual difference in early Doric buildings, we get the intercolumniation of 2.70 m. for the inner, and 2.43 m. for the outer columns.

The number of columns on the sides cannot be determined with the same certainty. Dörpfeld has pointed out¹³ that in early Doric temples the intercolumniation of the sides is less than that of the fronts, citing the Heraion at Olympia, the old Athena temple on the Athenian acropolis, and the temple at Corinth. The least number of columns on the sides corresponding to this law is 19, with an intercolumniation of 2.58 m. But, as far as the writer has examined the subject, no temple with 19 columns is known with certainty, and hence it has seemed better to restore the present temple as having 18 columns on the flanks, with an intercolumniation of 2.74 m., only slightly greater than that of the ends. Our restoration is consequently drawn in accordance with this view, though 19 may have been the correct number. Durm¹⁴ mentions only one temple, the Artemision at Syracuse, as having 18 columns, and that instance does not appear to be free from doubt.¹⁵


The two columns *in antis* have a diameter of about one metre. The plan of the cella is an unusual one, there being three cross-walls, *C*, *D*, *E*, which form, beside the pronaos, naos, and opisthodomos, an additional small chamber, *S*. It cannot now be made out from the remains in which direction this room opened; that is, whether the door was in the wall *E*, or in *D*, since of course no traces of the doorway exist on the foundation-walls remaining. It seems probable, however, that the door was in the wall *E*, as indicated in the PLAN,

¹³ *Mith. Athen*, 1886, p. 303.

¹⁴ *Baukunst der Griechen*, p. 76.




¹⁵ [The "Basilica" (probably Temple of Demeter and Persephone) at Paestum has 18 columns on the flanks.—T. W. L.]

the chamber *S* thus opening upon the opisthodomos, as at Corinth¹⁶ and in the Parthenon, and probably being used as the treasury of the temple. It is hardly large enough to have been a separate sanctuary, as at Corinth. Both pronaos and opisthodomos are unusually deep relatively to the width, the pronaos being the deeper by 1.10 m. All the superstructure, as well as the stylobate, may have been built of marble, which would account for the complete absence of any parts of it, owing to the destruction by the Byzantines and Turks of this material in making lime. The small column mentioned above does not fit in anywhere, and undoubtedly belongs to some other building. The occurrence of the "votive sockets," the walls *N* and *O*, and the platform *M*, which was probably the basis of an inclined plane or flight of steps leading to the temple at the west end, and the total absence of such remains at the east, are all features of interest.¹⁷

The date of the temple whose remains are before us can be taken as of the fifth, or perhaps the sixth century B. C., on the evidence both of the -clamps,¹⁸ seen in block *P*, and of the style and workmanship of the masonry.¹⁹ The column-ratio of 6:18, as well as the arrangement of the cella, point to an early date.²⁰ It is possible that the plan and foundation-walls are of an early date, say the sixth century, while the superstructure was later, of the fifth or even the fourth century. The layer of blackened earth which has been described points to some building which once stood on the site and was destroyed by fire. I will endeavor to show later that the superstructure, at least, dates from 427 B. C.

¹⁶ *Mith. Athen*, XI, p. 297.

¹⁷ [The inclined plane may possibly have been used for processions arriving from the town (which would then lie mainly to the west or southwest of the temple) in order to ascend at the west end, divide into two bodies, and pass through the colonnade on either side to the east entrance.—C. W.]

¹⁸ -clamps were used, it is true, in the Choragic monument of Nikias at Athens (320–19 B. C.), while contemporaneous buildings at Olympia show the  form (DÖRPFELD in *Mith. Athen*, 1885, p. 227). The  shape, however, was in general use throughout the fifth century, and is characteristic of the work of the best period.

¹⁹ Dr. DÖRPFELD, judging from my description, notes, and drawings, expresses the opinion that the outer walls were of the sixth or fifth century B. C., and that the inner walls might be as late as the fourth century, but were probably earlier.

²⁰ Cf. Temple *C* at Selinous (6:17) about 600 B. C., and the Heraion at Olympia (6:16). [The newer temple at Lokroi (6:17 columns), also with very deep pronaos and opisthodomos, is probably not older than the middle of the fifth century.—T. W. L.]

Now for the identification of our temple, and of the divinity to whom it was dedicated. Fortunately our range of selection is very narrow, only four temples, these of Hera, Athena Areia, Eleusinian Demeter, and Artemis Eukleia, being mentioned by the ancient writers as existing at Plataia. Pausanias (ix. 2) mentions an altar to Zeus Eleutherios, but there seems to have been no temple to him. He also speaks of a heroon to the nymph Plataia (*loc. cit.*), apparently a small chapel, as he does not describe it. Herodotos,²¹ Thukydides²² and Plutarch²³ mention a heroon of Androkrates; but this lay near the fountain Gargaphia, in the plain, twenty stades from the city. The temple of the Eleusinian Demeter²⁴ also lay at a distance from the city, on the mountain-slope near a spot called Argiopios; and so our choice lies between Hera, Athena, and Artemis. The temple of Artemis is mentioned only once, by Plutarch,²⁵ and, as Pausanias does not speak of it, it may be safely assumed that it was small or of little importance. Of the temple to Athena, we learn from Pausanias²⁶ and Plutarch²⁷ that it was erected at a cost of eighty talents out of the Plataeans' share of the booty from the battle in 479 B. C., that it contained an acrolithic statue of Athena by Pheidias, and that it was adorned with paintings by Polygnotos. Herodotos, strange to say, makes no mention of it, though he goes into great detail about the division of the spoil.

Of the Heraion we fortunately have fuller information. It is first mentioned at the time of the battle in 479 B. C., when the left wing of the Greek army, falling back in some disorder from the spring Gargaphia, retreated toward the city and took up their stand in front of the sacred precinct of Hera,²⁸ which, according to Herodotos, "lay before the city" (*πρὸ τῆς πόλεως*). Pausanias, the Spartan general of the allied forces, who was stationed at Argiopios, near the temple of Demeter, looked toward the Heraion and prayed to the goddess when the sacrifices continued unfavorable.²⁹ We next hear of it in Thukydides (III. 68), who relates how, after the close of the siege of Plataia, (427 B. C.), when the Thebans had razed the city about a year later, they first built an inn (*καταγώγιον*), 200 feet square, near the Heraion, made and dedicated couches to Hera, and built in her honor a "stone

²¹ HEROD., ix. 25.²² THUK., III. 24.²³ PLUT., *Vita Aristid.*, xi.²⁴ HEROD., ix. 57; PLUT., *loc. cit.* Cf. Mr. Hunt's paper in *AJA*, vi, pp. 463-75.²⁵ PLUT., *Vita Aristid.*, xx.²⁶ PAUS., ix. 4.²⁷ PLUT., *Vita Aristid.*, xx.²⁸ HEROD., ix. 52.²⁹ HEROD., ix. 61; PLUT., *Vita Aristid.*, xviii.

temple of a hundred feet" (*νεὸν ἑκατόμποδον λίθινον*). Pausanias (IX. 2), writing in the second century A. D., says that it is well worth seeing on account of its size and the beauty of its statues, of which he mentions two by Praxiteles, and one by Kallimachos.

We can now compare our observed facts with the statements of the above mentioned writers, and form an opinion whether we have here a temple of Hera or one of Athena. There is, of course, the alternative that our temple was dedicated to some other divinity, not mentioned by the Greek authors; but, as the remains show that the temple was a large one and in a commanding position, this supposition may be safely dismissed. All the evidence seems to point to identification with the Heraion, the largest and most important temple at Plataia. In the first place, there is no evidence either for or (directly) against identification with the temple of Athena, with regard to which our information is scanty and not precise; so we may exclude this temple and confine our discussion to the Heraion.

To start with the position, we find that the site of our temple agrees well with the words of Herodotos, *πρὸ τῆς πόλεως*, and also with the description of Pausanias, who speaks of it as if it were *inside* the city when he saw it. Judging from the remains of the city-walls,³⁰ we know that at the time of the great battle the city of Plataia lay at the upper, *i. e.*, the southern, end of the plateau, and that it occupied only a small area is shown by the fact that during the siege in 427 B. C. a force of 480 men was sufficient to hold the city.³¹ This being the case, the town would slope down toward the broad end of the plateau and face the north, so that the preposition *πρὸ* is the natural one to use of a building situated as is the newly discovered one. By the time of Pausanias, however, the town had grown down the slope, and, as shown by the walls, probably occupied most of the space to the north of the upper cross-wall,³² the newly discovered wall being apparently the northern limit of the city at this time; so that, when Pausanias saw the town, our temple must have lain inside the city-walls, just as he speaks of it.

The incident of the retreat of the left wing of the Greeks from the fountain of Gargaphia toward the city, also points to the identity of our building with the Heraion. As related by Herodotos, the Greeks intended to fall back from Gargaphia upon the so-called Island, which

³⁰ Cf. paper by the author in JOURNAL, vol. VI, No. 4.

³¹ THUK., II. 78.

³² Cf. MAP, AJA, vol. VI, PLATE XXIII.

lay in front of the city, but, taking fright at the Persian cavalry, they fled toward the city itself and halted at the Heraion. Now the road to Thebes, leading past or near the "Island," would probably be crossed by the retreating Greeks, and would be the most natural route to take back to the town, marching upon it being much easier and quicker than in the heavy fields on either side. Then, as mentioned above, there is a gentle ascent to the plateau between *V* and *W*, and straight across the path of the advancing body of men stretches the moderately high and steep slope of the temple-terrace, enough to check their onward rush. The sanctity of the spot would appeal to them as a protection, and on the plateau just below the site of our temple they would naturally halt, under the shadow of the sanctuary of the great goddess of the Plataeans. A glance at the map of Plataia will make the position clear.

It may also be brought forward, in support of our view, that the temple in question would be visible from the spot fixed upon by Mr. Hunt as the site of the temple of Demeter. This argument is of no great weight, as Pausanias perhaps looked only *toward* the Heraion. The roof of it would probably be visible to him, or enough of it to give him an idea of where it lay.

The small clay figurine may be a votive copy of the seated statue of Hera by Kallimachos which was known as the "Bride."³³ Hera, as the bride of Zeus, is commonly represented with a veil, and the figurine has a veil over her head. We know that Hera was the chief goddess of Plataia, and that our temple was an important one is shown by its size alone, since it is larger than the Temple of Apollo at Bassæ, or the Heraion at Olympia. The coin of Licinius also goes to show that our temple was standing in his time and hence must have been seen by Pausanias. All these facts being taken into account, the conclusion that we have here the Heraion is a very natural one.

There is, however, another line of argument which points to the same conclusions with reference both to the date of erection and to the builders of our temple. This is based on what Thukydides says of the action of the Thebans after the close of the siege of Plataia, in 427 B. C. On the MAP of Plataia there appears, on the level surface of the plateau just below our temple, a spot marked *Agora*, where there is a wall, 31.80 m. long, with about eight piers in the same line. This wall and the piers are of the Roman period and built in *opus incertum*, of rubble and mortar. This was probably

³³ PAUSANIAS, IX. 2. 3.

the Agora of the Roman town, and it seems probable that it was built on the site of the old *καταγώγιον*, erected by the Thebans for the "reception of those who might come to worship at the temple of Juno,"³⁴ and who would have no accommodations after the destruction of the city. Such a building, the resort of pilgrims and merchants, would naturally become, in course of time, the commercial centre of the new-built city, and might well be replaced by the Roman Agora. If this is indeed the case, our temple is undoubtedly the Heraion; and we have further evidence to the same effect in the layer of blackened earth, which proves that an earlier building once existed on the site. This earlier building may have been destroyed by the Persians, before the battle of Salamis, or perhaps by the Thebans, though it is unlikely that they would have burned a temple of Hera.³⁵ It seems hardly probable, however, that they would build a new temple; though they may perhaps have pulled down the old structure to replace it by one more splendid. The plan in its disposition is evidently pre-Persian; and it may very well be that the Thebans used the old foundations, and made a new superstructure of marble, which would accord with the use of the word *λίθινον*.

We get further confirmation of this view from a consideration of the word *ἑκατόμπεδος* and an examination of the dimensions of our temple. It is well known that the naos of the Athenian temple of Athena was called Hekatompedon from its length of 100 Attic feet, without counting the end walls, one Attic foot corresponding to 0.308 metre. Adding the lengths of the compartments *Q, R, S, T*, and the walls *C, D, E* (leaving out the walls *B, F*), in the plan of our temple, we get a length of 35.30 m., only 4.50 m. longer than the 30.80 m. required. The difference is not great, and it is very probable that the term was used merely as an approximation.³⁶

All the facts and arguments thus seem to point to the conclusion that the newly discovered temple is the famous Heraion, and that it was built by the Thebans in the year 426-5, after the destruction of an earlier temple on the same site. This being the case, the statue

³⁴ ARNOLD, *Note to Thuc.*, III. 68.

³⁵ If they did, the new temple and the dedicatory couches may be considered as offerings in expiation.

³⁶ [From the east side of wall *E* to the columns at *B* is a length of 30 m., which is very close to that of the Athenian Hekatompedon. If this view is adopted, it is probable that the chamber *S* opened into the cella *R*, as at Segesta.—C. W.]

of Rhea by Praxiteles would have stood in the chamber Q, the pro-naos, while the large statue of Hera would have been at the west end of the naos, R. The seated statue of Hera, by Kallimachos, may also have stood in the same room, or may possibly have been in S or T.

It is greatly to be regretted that no inscription was found to settle the matter beyond all cavil; and further excavation on the site might yield something of importance.

HENRY S. WASHINGTON.

Venice,

September 17, 1891.

APPENDIX.

A few objects of slight importance were brought to light during the excavations which do not affect the main subject of interest.

In the excavations last year and also this year, there were found at *Church I* several (about half a dozen) small stone implements or tools. They are of a very light brown, translucent, obsidian, of a long, blade-like shape, pointed at one end, with an obtuse triangular section, and bent slightly convex toward the apex. In length they are 0.05–6 m., in breadth about 0.05 m., and in thickness (apex to base of section) about 0.02 m. As they are too slender for cutting- or scraping-blades, the only obvious explanation seems to be that they were arrow-heads, though their slight curvature would apparently be a disadvantage. Some specimens are among the small articles in the so-called museum at Kokla.

One of my workmen pointed out to me an inscription which he had uncovered earlier in the spring when ploughing a small field at *Church VII*. It is on the flat face of a block of white marble, 0.67 m. long. by 0.30 m. high, which is apparently the dripstone of an Ionic entablature, with the egg-and-dart and reel-and-bead mouldings above. The inscription, in letters 0.02 m. high, of the second century A. D., is complete in the beginning, but ends with the broken stone at the right. It runs as follows: ✠ΟΑΓΕΠΙΚΚ ΔΙΟΝΥΣΩΔΩΡΟΣ, which may be read: ✠'Ο ἅγιος ἐπίσκοπος Διονυσῶδωρος τοῦτο ἀνέθηκεν]. "The holy bishop Dionsodoros dedicated this." The inscription is evidently very much later than the dripstone, which is of very good workmanship.

Several short inscriptions found last year may be inserted here, as they are still unpublished.



NO. 1.—WALL K, LOOKING EAST.



NO. 2.—N. W. CORNER, LOOKING SOUTHEAST.

EXCAVATION BY THE AMERICAN SCHOOL AT THE HERAION OF PLATAIA.

1. Broken slab of white marble 0.45×0.14 m., found at a ruined church above the Vergoutiani Spring where Mr. Hunt places the Temple of Demeter. Letters about 0.10 m. high.

ΟΕΙΩΑΥΤΩΝΚΟΙΜΗΙΙ

2. Fragment of late unfluted column of white marble, 0.24 m. high, 0.15 m. through, at a small ruined chapel of St. Demetrios, east of the plateau. Letters about 0.02 m. high.

C O / A Π
 A P T E M
 Φ I A O C O

3. Fragment of slab, of white marble, 0.23 m. high, 0.15 m. wide and 0.05 m. thick. Letters 0.02 m. high. From the "theatre site."

ΝΥΜΟΣ
 Λ Ο Υ

HENRY S. WASHINGTON.

Venice,

September 17, 1891.

DISCOVERIES BY THE AMERICAN SCHOOL AT
PLATAIA IN 1890.

VI. VOTIVE INSCRIPTION.

ΑΙΔΕ ΑΝΕΘΗΚΑΝ

- ΚΛΕΩΑΜΜΑΤΙΑ·ΥΟΧΡΥΣ ΥΠ Φ Α ΦΙΑΛΗΝΛΥΣΙΤΤΑΦΙΑΛ
ΔΑΜΩΦΙΑΛΗΝΤΕ Τ ΧΡΥ
ΝΙΚΑΡΕΤΑΦΙΑΛΗΝ ΘΕΟΓΙΤΑ
ΝΙΚΑΡΕΤΑΦΙΑΛΗΝ Ρ
5. ΦΙΑΛΗΝΚΑΛΛΙΣΤΡΑ ΤΥΧΙΞ
ΦΙΑΛΗΝΚΛΕΟΜΑ:
ΜΙΤΑΦΙΑΛΗΝΑΜ
ΟΙΑΛΗΝΘΕΟΙΟΤΑ
ΞΑΝΘΙΤΤΑ·ΩΜΙΣΚ
10. ΣΩΣΙΧΑ·ΟΥΚΕΦΑΛ
ΛΑΜΤΑΔΙΟΝΕΝΩ
ΣΩΣΙΚΛΕΙΑΕΝΩ
ΛΑΜΤΑΔΙΟΝΑ
ΛΑΜΤΑΔΙΟΝ·ΑΝΑ
15. ΝΟΤ·...·ΟΥΣΟΥ
ΙΔΙΑΔΥΟ
ΝΤΟΛΥ
ΑΛΗΝΑ
ΟΜΑΧΗ
20. -ΙΔΙΑ
ΥΚΑΣΤΗΦΙΑ
ΛΑΜΤΑΔΙΟΝΕΥ
ΥΠΟΝΛΑΜΤΑ
Ι·ΥΞΙΣΜΕΛ
25. Ε·ΓΙΤΑΔΑΚΤΥΛ
·ΝΩΤΙΔΙΟΝΛΑ
··ΛΙΣΤΑΛΑΜΤΑ
··ΑΛΗΝΝΙΚΑΡΕ
·ΑΡΔΑΜΗΑΛΥ
30. ·ΟΛΥΚΑΣΤΗ
·ΡΙΑΛΕΥΚΑΣΤ
ΔΑΙΔΑΔΗΜΗΤ
ΜΝΑΣΑΡΧΑ
·ΟΣΜΙΑΛΑ

35. 1οΧΙΝΗΤ
·ΑΙΔΑΘΕ
ΟΙΑΛΗΝΑΝ
ΟΜΟΛΩΙΣ
ΚΟΡΗΤΩ
40. 7ΕΙΜΟΚ
·ΛΛΛΙΣ
·ΑΜΤΑ
ΙΔΙ
·ΟΡΗΤΩ
45. Η
·ΛΗΝ
·ο
·ΑΡΔΑΜ
·ΕοΔοΤ
50. ·ΡΗΣΙΜΑ
·ΙΚΑΣΙΣ
Π
·οΓΙΤΑ
·ΑΛΑΜΙ
55. ΔΕΞ
ΔΑΣ
·ΕΝ
- Ρ
ΦΙΑΛΗΙ
60. ·ΕΩΝΙΣ ΝΥΣΙΑ
·ΕΜΙΣΤΩΔΑΙΔΑΚΟΡΗΤΩ
ΙΩΠΥΡΑΔΑΙΔΑΤΤΑΡΑΜΟΝΑΔ ΝΙ
ΔΑΙΔΑΦΙΛΟΞΕΝΑΦΙΑΛΗΝΦΙΛΤΙΣΛΑΜ·ΑΔΑ
ΑΓΗΣΙΣΛΑΜΤΑΔΑΝΙΚΑΣΙΣΤΥΤ·ΝΕΥΤΥΧΑΤΥΤ
65. ΚΕΦΑΛΗΝΤΑΝΑΡΜΩΕΝΩΙΔΙΑΔΥΟΑΘΗΝΟΔΩΡΑ
·ΥΒΟΥΛΑΙΩΝΗΝΑΡΓΥΡΑΝΚΑΡΔΑΜΗΔΑΙΔΑ·Υ
·ΝΩΙΔΙΑΔΥΟΣΥΡΑΔΑΙΔΑΤΤΑΝΑΡΜΩΔΑΙΔΑΣΤ
·ΑΙΔΑΕΛΕΥΘΕΡΙΣΔΑΙΔΑΑΓΗΣΙΣΣΤΕΦΑΝΩΜΑΛΑ...ΤΥΤΟΝ
·ΟΛΥΚΑΣΤΗΔΑΙΔΑΣΤΕΝΤΕΔΑΦΝΙΣΔΑΙΔΑΕΤΙΝΙΚΑΔΑΙΔΑΑΓΗΣΙ
70. ·ΑΙΔΑΚΟΡΗΤΩΔΑΙΔΑΙΕΥΞΙΣΦΙΑΛΗΝΟΝΑΣΙΜΑΤΥΤΟΝΔΙΟΝΥΣΙΑ
·ΑΙΔΑΔΑΜΟΔΙΚΑΔΑΚΤΥΛΙΟΝΑΚΑΡΗΧΡΥΣΟΥΝΚΛΕΩΜΗΔΑΙΔΑ
·ΤΥΛΙΔΙΟΝΑΡΓΥΡΟΥΝΞΕΝΟΚΡΙΤΑΕΝΩΙΔΙΑΔΥΟΛΑΜΤΡΙΧΑΔΑΙ
·ΑΡΔΑΜΗΔΑΙΔΑΤΤΟΛΥΚΑΣΤΗΒΟΥΚΕΦΑΛΗΝΜΝΑΣΙΚΛΕΙΑΔΑΙ
·ΝΙΟΧΑΤΑΕΦΑΥΤΗΣΣΥΡΑΔΑΙΔΑΤΤΑΡΑΜΟΝΑΔΑΙΔΑΚΛΕΟΜΤ
75. ΙΔΑΑΡΙΣΤΟΚΡΑΤΕΙΑΔΑΙΔΑΦΙΛΟΞΕΝΙΣΕΩΤΙΣΚ
ΥΚΕΦΑΛΑΣΙΡΙΣΤΙΝΑΚΑ
·ΣΗΝ
- 77.

ΩΦΙΑΛΗ

ΑΜΩ

ΔΑΙΔΑ

ΑΙΔΑ

ΑΙΔΑ

ΤΑΤΡΙ

ΛΑΜΤΑΔΑ

Ω·οΥ

Α

ΣΟΒΑΡΟΝ

ΑΔΑΙΔΙΧΙ

35. Μοχίνη τ
[δ]αῖδα Θε
φιάλην 'Αν
'Ομολώϊς
Κορητῶ
40. Τειμοκ[ράτεια]
[Κ]αλλισ[τῶ] or [Κ]αλλισ[τράτα]
[λ]αμπά[διον]
'Ηδί[στα]
[Κ]ορητῶ
45. η
[φιά]λην
ο
[Κ]αρδάμ[η]
[Θ]εοδότ[α]
50. [Χ]ρησίμα
[Ν]ικασίς
π
[Θε]ογίτα
[Ιδ]α λαμπ[άδιον]
δεξ
55. δας
εν
ρ
φιάλην
60. [Λ]εωνίς [Διο]νυσία
[Θ]εμιστῶ δαῖδα, Κορητῶ
Ζωπύρα δαῖδα, Παραμόνα δ[αῖδα] νι [Εὐ]πατρί[α]
δαῖδα, Φιλοξένα φιάλην, Φιλωτῆς λαμπ[π]άδα, λαμπάδα
'Αγησίς λαμπάδα, Νικασίς τύπ[ο]ν, Εὐτύχα τύπ[ον], ω [β]ου-
65. κεφαλὴν, Παναρμῶ ἐνώδια δύο, 'Αθηνοδώρα
[Ε]ὐβούλα ζώνην ἀργυρᾶν, Καρδάμη δαῖδα, . . ν Σοβαρόν
[ἐ]νώδια δύο, Σύρα δαῖδα, Παναρμῶ δαῖδας τ [δαῖδ]α, Δαιδίχη
[δ]αῖδα, 'Ελευθερίς δαῖδα, 'Αγησίς στεφάνωμα, Λα[μᾶχη
δικα] τύπον,
[Π]ολυκάστη δαῖδας πέντε, Δαφνίς δαῖδα, 'Επινίκα δαῖδα, 'Αγησί[ς]
70. [δ]αῖδα, Κορητῶ δαῖδα, Ζευξίς φιάλην, 'Ονασίμα τύπον, Διονυσία
[δ]αῖδα, Δαμοδῖκα δακτύλιον ἀκαρῇ χρυσοῦν, Κλεώμη δαῖδα . . .
[σ]τυλίδιον ἀργυροῦν, Ξενοκρίτα ἐνώδια δύο, Λαμπρίχα δαῖ[δα],
[Κ]αρδάμη δαῖδα, Πολυκάστη βουκεφαλὴν, Μνασίκλεια δαῖ[δα],
[Η]νιόχα τὰ ἐφ' αὐτῆς, Σύρα δαῖδα, Παραμόνα δαῖδα, Κλεώμη
75. [δα]ῖδα, 'Αριστοκράτεια δαῖδα, Φιλοξενίς ἐρωτίσκ[ον],
[βο]υκεφαλᾶς, 'Ιρις πῖνακα
[χρυ]σῆν.

The stone bearing the inscription here published was found by Dr. Waldstein in March 1890, covering, with another stone which contained a part of the Edict of Diocletian relating to prices, a grave adjoining the wall of a Byzantine church near the southeast part of the old city-wall of Plataia. The church is marked VI-V on the map showing the field of excavations by the American School (vol. VI, pl. XXIII). The slab is of coarse-grained marble, probably of island origin. The space covered by the inscription is 0.85 m. long and 0.38 m. broad at the top, widening out to about 0.41 m. at the bottom. The stone is finished at the top with a series of mouldings, curved and plain, surmounted by five projecting serrations. It is broken obliquely across from the third line on the right to the fifteenth line on the left.

It was found lying with the inscribed side downward, but must at some time have been very much exposed to wear, either from footsteps or from falling water, so that the inscription is nearly all obliterated beyond recovery. About 12 lines at the bottom may be read almost entirely. Besides this a narrow strip along the left side yields something in nearly every one of the 77 lines which appear on the stone. On the right, we get very little from line 3 to line 58. But for a small fragment found near the main slab, containing an inscribed surface about as large as the palm of the hand, it might have been difficult to determine just how many lines the inscription contained. This fragment shows the concluding word of the inscription.

After the heading, ΑΙΔΕ ΑΝΕΘΗΚΑΝ, comes a list of female names, followed in nearly every case by a single offering, but in several cases by two offerings not connected by a conjunction. The letters are 7 millimetres high, those of the heading 9 millimetres. We are able to see, with tolerable certainty, that the stone-cutter has arranged his letters so that every line begins with the beginning of a word, except that *βουκεφαλὴν* is divided at the end of line 64. As each part of this word made an intelligible unit by itself, this was probably not felt to be a deviation from the principle adopted. Controlled by this principle, the stone-cutter sometimes brings his line to an end before reaching the edge of the stone. This appears to be the case in lines 60 and 61. Line 68 is especially interesting. Here, besides stopping somewhat short of the edge, he seems to have felt that he was going to fill out the space poorly and to have spread the word *τύπον* out of due proportion to the rest. On the other hand, in the next line he saw

himself getting near the end of the line with a good many letters still on his hands. He accordingly crowded them in, so that the ninth letter from the end of that line stands under the first letter of *τύπον*; thus in equal spaces we have in one case five letters, and in the other nine. In the latter case the *sigma* of Ἀγησίς is crowded nearly over the edge of the stone. A more marked case of irregularity, however, is seen on comparing the beginnings of the first and second lines. The stone-cutter appears to have started in the first line with letters of a somewhat smaller size than he liked, for in the second line 12 letters fill the space into which, in the first line, 18 are crowded. On account of these irregularities, it is difficult to tell just how many letters are to be supplied where the edge of the stone is chipped away.

In spite of these irregularities, however, the inscription, where it is visible, has a general appearance of neatness and evenness. When viewed in various lights more letters may be made out than appears at first sight possible. Perhaps an eye practised in reading obscure inscriptions would elicit a few more words from the worn surface of the stone. What I have been able to make out is given below.

NAMES.

The inscription yields with reasonable certainty 62 names of women given without the father's name. It consists, in fact, largely of names. But it is not for this reason devoid of interest. As Greek names are embodied thoughts, often highly poetical thoughts, a new name, in an inscription, with a meaning more or less transparent, makes some amends for a lack of matter of historical importance.

In the following list they are arranged alphabetically :

Ἀγησίς	Ἐπινίκα	Θεογίτα
Ἀθηνοδώρα	[Ε]ὐβούλα	Θεοδότα
[Ἀνδρ]ομάχη	Εὐγίτα	Θεοζότα
Ἀριστοκράτεια	[Εὐ]πατρία	*Ιρίς
Δαίδιχη	Εὐτύχα	Καλλιστρά[τα]
Δαμώ	[Εὐ]τυχίς	Καρδάμη
Δαμοδίκη	Ζευξίς	Κλεομά[χα]
Δαφνίς	Ζωπύρα	Κλεόμη
Δημητ[ρία]	Ἡδί[στα]	Κλεώ
Διονυσία	[Ἡ]νύχα	Κορητώ
Ἐλευθερίς	[Θ]εμιστώ	[Κ]οσμία

Λαμπρίχα	Νικώ	Σ[υ]άνα
Λευκάστ[η]	Ξανθίππα	Σωσίκλεια
[Λ]εωνίς	Ξενοκρίτα	Σωσίχα
Λυσίππα	Ὅμολωῖς	Τειμοκ[ράτεια]
Μίτα	Ὀνασίμα	[Φι]λίστα
Μνασάρχα	Παναρμώ	Φιλοξένα
Μνασίκλεια	Παραμόνα	Φιλοξενίς
Μοχίνη	Πολυκάστη	Φιλωτίς
Νικαρέτα	Σοβαρόν	[Χ]ρησίμα
Νικασίς	Σύρα	

It is not my purpose to comment here on every one of these 62 names. Most of them need no comment; names like Ἀριστοκράτεια and Σωσίκλεια are too common. The first thing worth noticing in the list is, perhaps, that certain names recur quite frequently. Πολυκάστη appears five times, Καρδάμη and Κορητώ four times, Ἀγησίς and Νικαρέτα three times, Δαμώ, Διονυσία, Ζευξίς, Θεογίτα, Κλεόμη, Νικασίς, Παναρμώ, Παραμόνα and Σύρα twice. Unless the inscription records gifts extending over a long period, we must suppose five different Polykastes, and infer that the name was a favorite one at Plataia.

One is at once struck with the Bœotian coloring of these names. Almost any Bœotian inscription containing a list of names affords some of those on this list. The one name, however, that is distinctively Bœotian is Ὅμολωῖς, from a stem that is very conspicuous in Bœotian proper names. Homoloîs is the name of the gate of Thebes at which Amphiaraios made his attack (Aisch., *Sept.*, 573), and the masculine form, Ὅμολώιος, is a common epithet of Zeus in Boiotia.¹ The two compounds with -γίτα, Εὐγίτα, "good neighbor," and Θεογίτα "neighbor to the gods," if not distinctively Bœotian names, are great favorites in Boiotia.² It is perhaps worthy of remark that Θεογεΐτων in Dem. XVIII. 296 is a Theban.

¹ AHRENS (*De Dial. Aeol.*, p. 76) endorses the derivation of Suidas and Photios, who make this a lengthened form of Aeolic ὄμολος for δμαλός. It would then mean "the even one," referring either to justice or to peaceableness. But this derivation is regarded as fanciful by MEISTER (*Griech. Dialekte*, I, p. 51).

² MEISTER, *Register zur Sammlung der griech. Dialekteninschriften*. The same list will perhaps show a recurrence frequent enough to be marked of such names as Ζώπυρος, Ὀνάσιμος, Παράμονος, all of which occur, the two latter more than once, in the short inscription from Thebes published by RANGABÉ, *Antiq. hellén.*, No. 705.

As names that may be distinctively Boeotian, we may add tentatively : *Καρδάμη* (see Meister, *Bœot. Inschr. Nachtrag*, No. 499, in Collitz, *Sammlung der griech. Dialekteninschriften*), *Μίτα* (Meister, No. 506), *Παναρμώ* (Meister, No. 721), "one who unites everybody." Unusual names not appearing in Pape, *Griech. Eigennamen*, or in other lists which I have consulted, are : *Δαίδιχη*, *Κορητώ*, *Λαμπρίχα*, *Μοχίνη*. Of these, *Δαίδιχη* and *Λαμπρίχα* are *Koseformen* with the common Boeotian ending (see the Boeotian section in *CIG*, and Koumanoudes in *Ἀθήναιον*, IV, 270 seq.). *Μοχίνη* is probably a *Koseform* also, with a different ending. The stems of this and *Δαίδιχη* are difficult to make out. A guess at *Δαίδιχη* would be "my dear little torch" or "light." *Λαμπρίχα* is evidently "my dear little shiner" or something of the sort.

Pape makes *Κορητώ* from *κόρη*. This would doubtless also be counted as a *Koseform* (see Fick, *Griech. Personennamen*, p. xxii f.). The *tau* in this formation is perhaps employed after the analogy of so many forms with legitimate *tau*, as *Λεοντώ*, *Πειστώ*, *Χαριστώ*, *Στρατώ*, *Φελιστώ*, *Μαντώ*, *Θεμιστώ*, *Καλλιστώ*. In *Κλεόμη* we have a *Koseform* made by shortening *Κλεομήδα*.³ Thus we have here the two methods of making *Koseformen* : (1) by addition of an ending (*ιχα*), as *Johnnie* for *John* ; (2) by shortening, as *Will* for *William*.

Striking names and apparently not hackneyed, are : *Ἡνιόχα*, "rein-holder," a name of bad omen for a girl, an epithet of Hera at the sanctuary of Trophonios (Paus., IX. 39. 4) ; *Κοσμία*, "neat ;" *Παραμόνα*, "steadfast ;" *Σοβαρόν*, perhaps "magnificent," *Χρησίμα*, "useful," *Ζωπύρα*, "spark" (very common in Boiotia). *Ὀνασίμα*, "delightful," and *Εὐτύχα*, "lucky," are just as expressive, but have lost their newness. *Ἡδίστα* and *Φιλίστα* are perhaps not open to this charge. *Ἐλευθερίς* recalls the favorite epithet of Zeus and the festival *Ἐλευθέρια*, at Plataia (Paus., IX. 2. 5 seq.).

OBJECTS MENTIONED IN THE INSCRIPTION.

The following is an alphabetical list of the offerings : *ἄλυσις*, chain ; *ἀμμάτιον*, cord, cf. *παρθενίας ἄμματα λύμενα* (*Anth. Gr.*, VII. 182) ; *βουκεφαλή*, cow-head or ox-head ; *βωμίσκος*, little altar ; *δαῖς*, torch ; *δακτύλιον*, ring ; *ἐνώδιον*, *ἐνώτιον*, *ἐνωτίδιον*, earring ; *ἔρια*, wool ; *ἐρωτίσκος*, little love ; *ζώνη*, girdle, like *ἀμμάτιον* ; *λαμπάς*,

³ It may be that the full form *Κλεομήδα* was used in line 74.

λαμπάδιον, torch; πίναξ, tablet; στεφάνωμα, crown or wreath; στυλίδιον, little column; τύπος, relief; φιάλη, bowl; τὰ ἐφ' αὐτῆς.

For the explanation of many of these objects, see Homolle in *Bull. de corr. hellén.*, VI (1882) p. 108 *seq.* There are several here which strike us as unusual; such are: βουκεφαλή, βωμίσκος, δαῖς, ἔρια, ἐρωτίσκος, λαμπάς, στυλίδιον. But strangest of all is the offering τὰ ἐφ' αὐτῆς, "things at her command" (*cf. Ar. Plut.*, 100, τὰ ἐπ' ἐμοῦ), what she was wearing at the time, or something of the sort. This Heniocha "did what she could:" while others gave gold rings and silver girdles of their abundance, she, not wishing to be left out, gave of her poverty apparently some articles not specified.

Of the objects mentioned, δαῖς, although not occurring until line 32, holds the first place in frequency, being mentioned twenty-nine times, and several of these mentions are of plural offerings. Once, in line 69, five δαῖδες are offered by one woman. Besides this, δαῖδα seems to shimmer throughout the bad parts of the stone where the eye sees something like ΛΛ ΛΛ, and again it would come in just right to fill out a line like 3, where we are dependent upon conjecture for the reading. λαμπάδιον is mentioned ten times, once in the plural. A passage in Dikaiarchos (Müller, *Frag. Gr. Hist.*, vol. II, p. 259) might lead us to suppose that this was a headband of the women, or a top-knot of the hair itself. Speaking of the Theban women, Dikaiarchos says: τὸ δὲ τρίχωμα ξανθόν, ἀναδεδεμένον μέχρι τῆς κορυφῆς· ὃ δὲ καλεῖται ὑπὸ τῶν ἐγγχωρίων λαμπάδιον. But attractive as this supposition might be, arraying λαμπάδιον, as it does, with the other articles of female dress, it is safer to take it to mean the same as λαμπάς, which occurs three times, and to take both in the sense of δαῖς⁴ with possibly some difference of form indicated by the choice of a different word. These torch-offerings are thus very prominent in this inscription. In the part that is readable, the torch is mentioned about as frequently as all the other objects put together. It is, of course, not surprising to find φιάλη coming next in order of frequency. There is hardly any list of temple-treasures in which the φιάλαι are not the most numerous of all the offerings. Perhaps in most lists φιάλαι are as frequent as all other objects put together. Sixteen hundred φιάλαι are mentioned in the treasure-lists of the

⁴ *Cf. CLEMENS, Protr.*, II, 22: αἰδέσθητι, δοδοῦχε, τὰς λαμπάδας.

Delian Apollo.⁵ This displacement of the *φιάλη* from the place of honor makes the torch-offering peculiarly prominent.

In the Kabeiroi inscription published in the *Mittheilungen Athen*, 1890, p. 378 *seq.*, we have a list of names of men and women together with their offerings, among them the following :

Σκόπας . . . ἄλυσιν·

᾽Ωκυθόα . . . μάστιγα, δαῖδα·

Ἐνώμα δαῖδα ἀργουρίαν, ὀλκά δραχμὰ τρεῖς ὀβολοί·

Ἐρατὼ φιάλιον ἀργούριον.

This is the only inscription which I have been able to find containing *δαῖς* as an offering, though *λύχνος* and *λυχνία* are not infrequent.⁶ *CIG*, 1570, which gives an account of old offerings in the temple of Amphiaraios near Oropos, is also an analogous list, though of the articles on our list it names only the inevitable *φιάλη*, and this a good many times.

The lists of temple-treasures published in the *Corpus* and the archaeological periodicals naturally contain many of the objects here mentioned. Omitting *φιάλη*, as found nearly everywhere, the Parthenon lists (*CIA*, II, 642 *seq.*) contain: ἄλυσις, δακτύλιος, ἐνψῆδιον, ἔρια, πῖναξ, στέφανος; and for *βουκεφαλή* we have *κρίου κεφαλή* and *λέοντος κεφαλή*. The lists of Artemis Brauronia (*CIA*, II, 751 *seq.*) contain, besides the old clothes: ἄλυσις, δακτύλιος, ἐνψῆδιον, ἔρια, στέφανος, τύπος. The Asklepieion lists (*CIA*, II, 766 *seq.*) contain: δακτύλιος, πῖναξ, στέφανος, τύπος; also objects bound with a golden ἄλυσις, and objects ἐν or πρὸς πῖνακι. The lists of the Delian Apollo (*Bull. de corr. hellén.*, 1882, pp. 1-167) contain: δακτύλιος, ἐνώτιον, λαμπάς, στέφανος and στεφάνωμα, τύπος. Analogous to *δαῖς* is, perhaps, *πέυκη κληματίς*. Here appear also objects with ἁλύσεις, also *βουκεφάλια* and *αἰετοῦ κεφαλή*. The Eleusis lists (*Ἐφημερὶς Ἀρχαιολογική*, 1888, p. 42 *seq.*) contain: δακτύλιος, ἐνψῆδιον, στέφανος. *CIA*, II, *Nachtrag* 682° has πῖναξ, and also *λαμπαδεῖον*. The silver-inventory of Amphiaraios (*Ἐφημερὶς Ἀρχ.*, 1889, p. 1 *seq.*) has, besides *φιάλη*, *βωμίσκος* several times, as well as *φύλλα τοῦ στεφάνου*, and objects with figures of Ἐρως on them.

⁵ HOMOLLE, *Bull. de corr. hellén.*, 1882, p. 108.

⁶ Cf. *CIG*, 2352; LE BAS, *Voyage Archéologique*, III, No. 245 (Smyrna inscription), τὰς λυχνίας σὺν τοῖς λύχνοις. *λαμπαδεῖον* occurs (*CIA*, II, *Nachtrag* 682°) in an offering to Demeter. Cf., also, *Bull. de corr. hellén.*, 1882, p. 135.

Presumably the objects mentioned in the Plataean inscription were mostly of gold and silver. The reason why the material is several times mentioned is, probably, that the object might otherwise have been understood to be of some other material; *e. g.*, ἀμμάτιον (line 1) might have been supposed to be a cord of ordinary fibre, albeit rich, had it not been stated that it was of gold. So of ζώνη in line 66. The dedicator would not have wished the little column of line 72 to pass for a column of mere marble. δακτύλιον (71) and ἐνωτίδιον (15) are said to be of gold, thus leading to the suspicion that the other rings and earrings were of silver.

TO WHAT DIVINITY WERE THESE OFFERINGS MADE?

It is of course not surprising that the name of the divinity should be omitted. The stone was set up in the consecrated precinct, so that there could be no mistake on that point. There was at that time no thought of the perplexity of the future archæologist who should find the stone amid new surroundings with no means of determining its provenience.⁷ There are, however, certain materials for a probable solution of the problem, though they hardly afford a complete demonstration. The fact that the dedicators are all women points to some female divinity. Among the offerings there are at least two⁸ which are out of the common run of offerings such as appear in most temple-inventories, and which, while they demand an explanation why they were offered, afford at the same time the materials for an answer to our question. The first is βουκεφαλή, which is mentioned twice. The cow-heads found by Dr. Schliemann at Mykenai may be taken, as understood by him, to be an offering to Hera, as patron goddess of the city.⁹ This is a very natural offering to the ancient moon-goddess, but the difficulty, with the supposition of Hera, is to account for the torch. This also might be thought to be a not unnatural offering to the goddess who presided over marriage. On the Io vase in the Berlin Museum, the image of Hera is represented as holding in

⁷ Most of the offerings at Delos are without the name of Apollo. The Athenians had no need to state that their stoa at Delphi was dedicated to Apollo.

⁸ ἐρωτίσκος, βαμίσκος, and στυλίδιον, not to mention some other objects, are also peculiar; but they occur only once.

⁹ SCHLIEMANN, *Mycenae*, p. 218. Cuts are also given on pp. 216-18 of the splendid silver cow-head with gold horns, and of the smaller ones of thin gold plate with axes between the horns. The large head in question seems certainly more like a bull-head.

one hand a torch and in the other a bow.¹⁰ But it must be confessed that neither in literature nor in the extant monuments of art do torches appear as a characteristic attribute of Hera, and there is very little reason to suppose that any such offering was ever made to her. Probably we should then give up the idea of associating this stone with the temple of Hera which is prominently mentioned by Herodotos in his account of the battle of Plataia.¹¹

There are, however, of the greater goddesses two who are always thought of as the torch-bearing divinities, Demeter¹² and Artemis. This is not the place to multiply proofs on that point, but merely to consider which of these two might be the one to whom this particular offering of torches was made. We have seen that the torch is here the distinguishing object, *δαῖς* and *λαμπάδιον*, having the place of honor occupied in the Asklepion lists by *ὀφίδιον* and *δρακόντιον*. To one or the other of these two goddesses, then, it is natural to refer the offering. It is true that we do not find elsewhere explicit mention of the offering of a *δαῖς* to either of them, but only to the Kabeiroi. We feel that this is simply surprising, and, if we had the slightest indication that elsewhere to either of these goddesses both a torch and a *βουκεφαλῇ* were offered, we should think it almost a demonstration that that goddess was the one here honored.

Now both these goddesses had sanctuaries in Plataia. That of Demeter is mentioned by Herodotos (IX. 65), Plutarch (*Arist.*, XI) and Pausanias (IX. 4. 2). It was outside the wall, and the battle with the Persians raged around it. Plutarch alone (*Arist.*, XX) mentions the sanctuary of Artemis. After telling the story of the swift messenger to Delphi, who died at the end of his journey and was buried in the precinct of Artemis Eukleia, he adds: "Most people call Eukleia Artemis, and regard her as such; but some say that she was the daughter of Herakles and Myrto, the daughter of Menoitios and sister of Patroklos, and that having died a virgin she has honors among the Bœotians and Locrians. For there is an altar and an

¹⁰ OVERBECK, *Kunstmythologie*, pl. VII. These objects, not being usual attributes of Hera, may be explained as given her in her capacity of Eilithyia. See PRELLER, *Gr. Myth.*, 4th edit., p. 172, note.

¹¹ IX. 52, 61. More recent excavations conducted by Mr. Washington have laid bare the foundations of a building which may prove to be the Heraion.

¹² If Persephone, whose attribute is a torch, was worshipped at Plataia, it would naturally be in subordination to Demeter.

image of her established in every agora, and brides and bridegrooms sacrifice to her before marriage."

The torch would then here be a natural offering to Artemis, even if we found no mention of it in connection with her. But, as in the case of Hera the torch was the difficulty, so in the case of Artemis it is the *βουκεφαλή*; though, even on this score, she is not to be summarily ruled out. Her epithet *ταυροπόλος* is at least suggestive. The story of Iphigeneia bringing her image from the Tauri is perhaps a Euripidean form of a myth connecting Artemis with some forgotten bull-cult. Diodoros (XVIII. 4) and Livy (XLIV. 44) speak of the worship of Artemis *ταυροπόλος* at Amphipolis; and, what is highly interesting, coins of Amphipolis show a female figure riding on a bull.¹³ Perhaps it is more than an accident that a vase of the Phaleric type in the Polytechnikon at Athens (No. 5839) has, by the side of a so-called Persian Artemis, a *βουκεφαλή* filling a little space which according to the artist's taste ought not to be left empty.

But, after all, these attempts to connect Artemis with the *βουκεφαλή* seem a little forced. Further light may come; but, in the meantime, the way seems cleared for the claims of Demeter. One's first thought, in connection with such a profusion of torches, is of Demeter, and in her case we find the slight indication which we seek, which makes us willing to believe that it was she rather than Artemis to whom these offerings were made. In the chapel of St. Zachariah at Eleusis are two gigantic torches, probably set up at Eleusis in honor of the goddess. We may say then that, if we have not found the name for which we were searching, we have at least found the thing. Furthermore, Karl Bötticher¹⁴ identifies two reliefs, one found at Athens and the other at Eleusis, with the cornices of the altars of Demeter, one in the Eleusinion at Athens and the other at Eleusis. Both these reliefs contain the torch and the *βουκεφαλή* combined. This is the slight hint that we have been seeking. Here is a connection of the two distinctive objects of our list.¹⁵ If these reliefs are of Roman times they

¹³ STEPHANI, *Compte rendu*, 1866, p. 102 *seq.*, gives a list of such coins for Amphipolis and adjacent parts of Macedonia, as well as some other places. He thinks that, wherever we have a woman riding upon a bull with no water indicated, we have not Europa but Artemis *ταυροπόλος*, who is one form of the Phœnician Astarte.

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are not, for that reason, too late to be put in evidence. Eleusis was a home of conservatism. The old customs were maintained under the Roman sway.

DATE OF THE INSCRIPTION.

The inscription can hardly be earlier than 200 B. C., judging from numerous signs: (1) The dialect is an approach to the *κοινή* in some of the names, *e. g.*, *Δημητρία* and *Πολυκάστη*. (2) The forms of the letters have nothing antique about them. The use of apices cannot go much, if at all, back of 200 B. C. The *alpha* with the broken horizontal bar also cannot precede this date.¹⁶ (3) The custom of dividing by syllables at the end of a line is a late one, not introduced at Athens until about 200 B. C., as may be seen by a glance at the *Corpus*. (4) The trace of *iotacism* in *Τειμοκράτεια* argues, though it does not prove,¹⁷ about the same date-limit.

The next thing is to get an approximate date below which the inscription cannot well be put. This is a matter in which it is more difficult to speak positively. But the following considerations may be adduced: (1) The names nearly all retain the Beotian form in the endings. *Δαμῶ*, *Δαμοδίκη*, *Ὀνασίμα*, *Ἀγησῖς*, retain the *alpha* in the body of the word. This could not have been the case after 100 B. C., when the *κοινή* had extended, with its levelling influences, to every place in the Greek world. (2) A comparison of the forms of the letters with those of Athenian inscriptions would seem to put this inscription in the first half of the second century B. C.¹⁸

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the torch is significant. Even the torch on the Eleusis relief looks doubtful. Bötticher regards the objects in question as unlighted torches bound with myrtle leaves. He calls attention to the almost complete similarity of the two reliefs in their general arrangement, and argues from the certainty that the Athenian relief shows torches to the conclusion that the objects on the Eleusis relief must be torches also. The Eleusis relief has the better example of a *βουκεφαλή*.

¹⁶ But for one of the alphas in the heading, one might hardly notice that the broken-barred alpha is really present. The letters in the rest of the inscription are so diminutive as hardly to make the break perceptible. Still when one's attention is called to the matter one sees that the middle of the bar is in nearly every case lower than the ends.

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merous destructions of Plataia and the centralizing influence of the Boeotian League. The Plataia that followed the battle of Chaironeia was largely a Macedonian creation. Yet the loss of a special tie between the two cities was more than made good by the general influence of Athens, which was no longer hemmed in by the borders of small adjacent states. The influence of Athenian custom was at this time probably strong enough to make Boeotian writing, as well as Boeotian spelling, a pretty good mirror of the Attic.

Of single letters, besides the *alpha* already mentioned, the most distinctive are Ι (ξ), Θ, Κ, ο, Π, Ω¹⁹. Any one of these peculiar forms, *i. e.*, the rectangular *zeta*, the small *theta*, *omicron*, and *omega*, the *kappa* with short oblique lines, and *pi* with shorter right-hand limb, might continue into the first century B. C. But it is doubtful whether all of them combined could come down far into the second century. Our judgment as to date must always be guided more by the total impression than by isolated peculiarities.

There are certain contrarieties in our inscription which are worth noting in their entirety, because, if we noted only one class of phenomena to the exclusion of others, we might be misled as to the age: (1) *Δαμώ* has an ancient look, but *Δημητρία* looks quite the reverse. (2) *Θεοζότα* must be old, one would think; for Boiotia cannot have retained the *zeta* for *delta*, which it had in common with Elis (Meister, *Gr. Dial.*, p. 264), after the pressing in of the *κοινή*. But we have also *Θεοδότα*. (3) *Ἀγησίς* seems old if we look at the *alpha*, but for *η* we should in Boeotian of any early date have *ει*.²⁰ (4) *a* final and *η* final balance each other. (5) The form of the letters Α, Μ, Σ, point to a late date, but the small ο and Θ with Κ and Ι cause one to hesitate. There is also the antique-looking *γίτα* in *Εὐρύτα* and *Θεογίτα*,²¹ against which we have nothing in particular to set as an antithesis.

All these indications, when properly balanced, seem to put our inscription in the time when Greece, under the influence of Macedonian military and political preponderance and of Athenian literary traditions, was losing its provincialism, and when local peculiarities of dialect were being crowded into nooks and corners. A good analogy to this inscrip-

¹⁹ Ψ is the only letter which does not occur.

²⁰ Cf. *Ἀγελίς* in the Thespian inscription published by JOHANNES SCHMIDT, in *Mith. Athen.* v, p. 130; *Ἀγελισπιος*, KEIL, *Zur Syll. Inscript. Boeot.*, in *Jahrbücher für Philologie*, 4^{te} Supp. Band., p. 521.

²¹ ΒΟΕΚΗ, *CIG.*, vol. I, p. 723.

tion is afforded by the Silver-Inventory of Oropos, published in the *Ἐφημερίς Ἀρχαιολογική*, 1889, p. 1 *seq.*, which B. Keil (in *Hermes*, 1890, p. 608) does not hesitate, in spite of iotacisms like *ει* for *ι*, to put at about 200 B. C. In its iotacism and its vacillation between *α* and *η*, our inscription is very much like the Nikareta inscription found at Orchomenos,²² which has *Νικαρέτα* and *Νικαρέτη* indiscriminately. In the matter of form, too, if we removed the apices from our inscription, we should have a remarkable resemblance in the letters to the Nikareta inscription, which is dated by Foucart 220–192 B. C., and by Meister 223–197 B. C.

RUFUS B. RICHARDSON.

²² Published by FOUCART, *Bull. de corr. hellén.*, III, p. 459 *seq.*, IV, p. 1 *seq.* Cf. MEISTER in COLLITZ, *Sammlung der griech. Dialekt-Inschriften*.

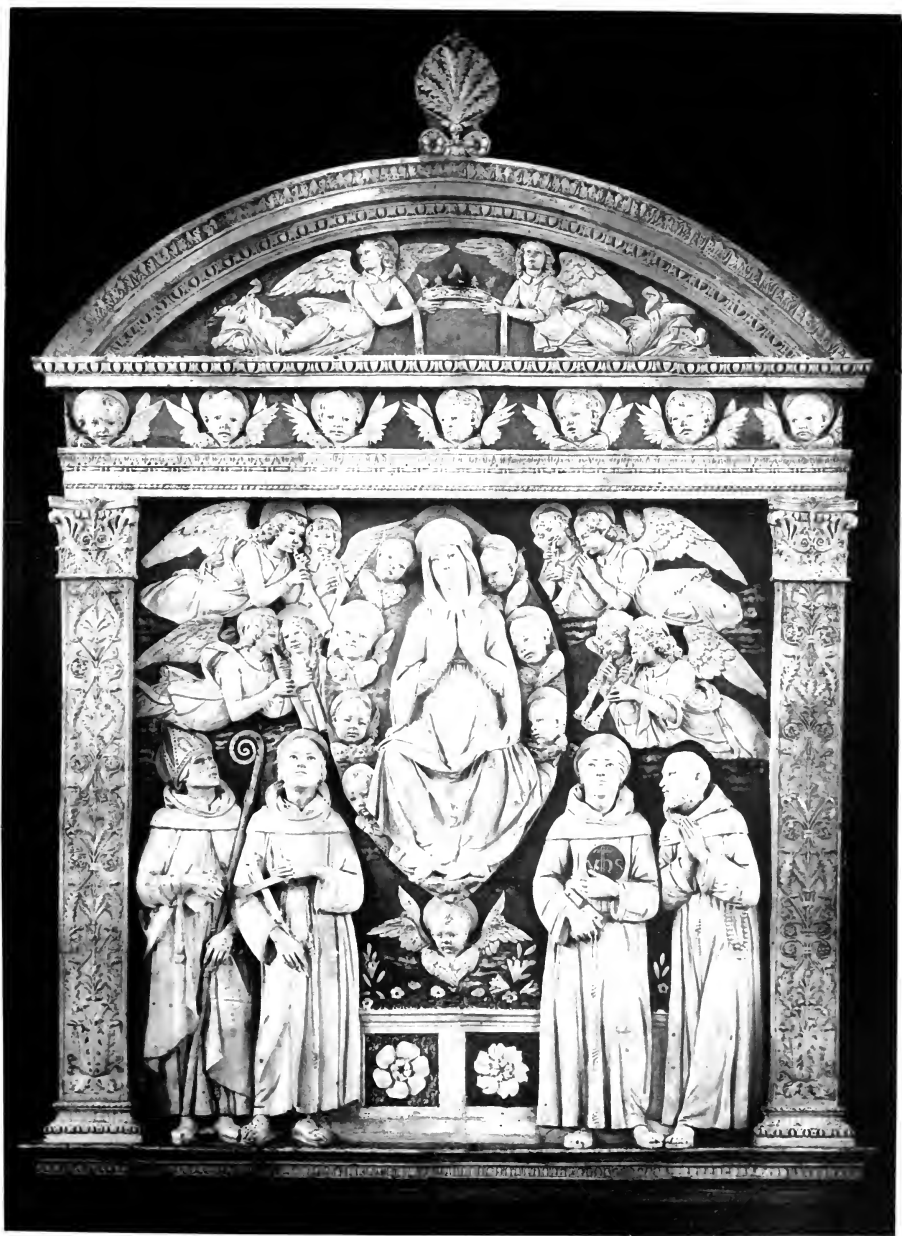
ANDREA DELLA ROBBIAS ASSUMPTION OF THE
VIRGIN IN THE METROPOLITAN MUSEUM.

[PLATES XXII, XXIII.]

This beautiful altar-piece came into the possession of the Metropolitan Museum in 1882. It was purchased through the late James Jackson Jarves of Florence, who represented it to be a Luca della Robbia which once adorned the private chapel of the Duke of Piombino. It has not hitherto been reproduced or carefully described.

Having occasion to examine photographs of the works of Luca, of Andrea, and of Giovanni della Robbia, I soon recognized in this monument unmistakable signs of the hand of Andrea. This opinion was strengthened on finding that a similar attribution had been made by Cavallucci and Molinier in their volume upon the Della Robbia (p. 283), and became a conviction when I examined the monument itself and the valuable collection of Renaissance photographs which Mr. E. D. Adams has recently presented to the Museum. An examination of the altar-piece reveals the fact that, at some time in its history, it had received considerable injury and that portions had been not merely repaired but replaced. Thus, the Virgin's head and hands, the head of one of the cherubs, the heads of the three monkish saints, and portions of at least four feet, are quite modern. Even where minor injuries had been received, mere abrasions of the enamel, the monument had been most brutally doctored for sale by the use of white lead, which was smeared in large masses over the surface. The greater portion of the monument, however, has remained untouched, and traces of its once brilliant coloring in matters of detail still remain (PLATE XXII).

The Framework.—Total height, $118\frac{1}{2}$ inches; width, at centre of architrave, 80 inches. The base, which probably constituted the cornice of a predella, measures, upper length, 88 inches; lower length, $80\frac{1}{2}$ inches; height, $5\frac{1}{2}$ inches; and consists of four blocks with four ornamental mouldings. The pilasters, with capital and base, measure $65\frac{3}{4}$ inches in height; capital, $8\frac{1}{4}$ inches; shaft, $53\frac{1}{4}$ inches; base, $4\frac{1}{4}$ inches. The bases are richly ornamented upon the scotia as well as upon the tores. The shaft is decorated with a graceful floral design



ASSUMPTION OF THE VIRGIN BY ANDREA DELLA ROBBIÀ.
METROPOLITAN MUSEUM, NEW YORK.





S. FRANCESCO.
LA VERNA.



S. BERNARDINO.
AREZZO CATHEDRAL.



ASSUMPTION
AREZZO CATHEDRAL.



S. ANTONIO OF PADUA.
SANTA CROCE, FLORENCE.



PRAYING SAINT.
AREZZO CATHEDRAL.



less conventional in character than upon similar altar-pieces attributed to Andrea. The same design is used for both pilasters ; but, owing to a defect in the baking or to a modification of the scheme of proportions, the two lower blocks of each pilaster are not precisely similar. As a consequence, the design terminates differently at the capital, and is not enclosed at the top by the flat fillet as in other similar works. Traces of gold remain upon the egg-and-dart ornament of the left pilaster. The architrave is 5 inches high, was made in four blocks and consists of two fasciae surmounted by a Lesbian cyma. It is decorated with a twisted band, an astragal and heart-leaf ornament. Traces of gold remain upon the two lower mouldings. The cherub-frieze is six inches high, and is constructed of six blocks neatly joined together. The frieze ends abruptly on both sides without architectural framework. The cherub-heads project from a background of dark-blue, and though delicately modelled in all details were made more striking by the use of color. The irises of the eyes are copper colored, and the pupils dark-brown. The upper and lower eyelashes are marked with blue. These colors were applied before burning and remain distinct. The details of the hair and wings were brought out by the use of red and brown paint applied after the burning, and remain only in traces. The glories about the cherub-heads were probably gilded : no color was applied to the faces. The sculptured tympanum, containing two angels bearing the Virgins' crown, is skillfully constructed of six pieces. The ground is colored dark-blue beneath the glaze. Traces of color are found upon the angels' eyes, hair, wings, also upon the collars and borders of their robes and upon the hanging bands. The angels' wings were modelled to the minutest detail, and nevertheless seem to have been brilliantly painted with red and gold. The jewelled crown was also painted. Even the inner circle of the crown was decorated with a very delicately incised scroll-work, which is invisible except upon close examination, and which could be made evident to the spectator only by the use of color. Traces of red and blue paint are also found on the framework of the tympanum and the rosettes and palmette at its crown.

The Central Panel.—The central panel, representing the Virgin rising in a glory of angels in the presence of four saints, is constructed of more than thirty pieces, and forms very nearly a perfect square, measuring $65\frac{3}{4}$ inches in height, and $65\frac{1}{8}$ in breadth. The Virgin's head and hands, and the head of the second cherub from the top to her right, are

modern. So also are the three uncovered heads of the standing saints, part of the right foot of the bishop and the three feet of the saints to the right. In regard to these portions which we call modern, it may be observed that the glaze is harder and has greater reflecting power than that of the rest of the monument, and is less pure, being speckled with extraneous matter. These modern heads are peculiar in being detached from their bodies, in having protruding eyeballs, blue irises and blue pupils, blue upper eyelids (instead of blue eyelashes), and short upper lips. They are, moreover, unparalleled in the works of the Della Robbia, are lacking in spiritual quality, and exhibit the anomaly of monks with unshaven heads!

This central panel exhibits a more polychromatic character than is usually attributed to the works of Andrea. The blue of the elliptical mandorla is lighter than the surrounding ground, the panels of the sarcophagus are imitations of a green and of a dull-violet marble; the leaves of the flowers on the Virgin's sarcophagus are green, the centres of the roses and rosettes, the clasps and knobs of the book, and the lettering on the disk held by one of the saints, are yellow. All of these colors are beneath the glaze and are permanent; so is the coloring of the eyes of all the figures. In addition, we find traces of superficial coloring on the hair, wings, garments, and trumpets of the angels, upon the border of the Virgin's robe, and upon the bishop's mitre, crozier, hanging band, and the border of his garment.¹

The questions that arise most prominently in a study of this work are: (1) the recovery of the types of the four heads that have been destroyed; (2) the identification of the figures of the saints; (3) the question of its authorship and date.

Fortunately, there are other monuments by means of which the original character of this altar-piece may be more adequately restored. In the Chapel of the Madonna in the Cathedral at Arezzo, there is an Assumption² in which we see precisely the same Virgin. This recovers a far more expressive and beautiful head for her figure in this altar-piece. Precisely the same S. Francesco, holding his cross

¹ From BRONGNIART, *Traité des Arts céramiques*, II, p. 56, we learn that the white enamel consists of silica, 49.65; alumina, 15.50; chalk, 22.40; magnesia, 0.17; iron, 3.70; carbonic acid and loss 8.58. The yellow is made from lead and antimony, the green from copper, and the dull-violet from manganese.

² Described by PASQUI, *La Cattedrale Aretina*, p. 143; photographed by ALINARI, No. 9411.

in the same way, is represented in a chapel of the church at La Verna.³ For the figure holding the disk, we find a close analogue in one of the altar-pieces in the same chapel at Arezzo.⁴ Though inferior in quality it preserves the same type. The praying monk I have not been able to restore with the same security. But, strangely enough, the same Virgin-chapel at Arezzo furnishes us with two figures of a praying saint, without distinctive attributes, in which we may recognize, not without some hesitation, the same individual that figures in our altar-piece. This figure appears in the retable representing the Trinity,⁵ and again under the organ-gallery by the side of the tablet representing the Virgin and Child.⁶ We select the former, since the saint here appears in connection with the same bishop represented on our altar-piece. These restorations, which are reproduced on PLATE XXIII, were selected from three separate collections of photographs, my search being directed merely to analogies of pose, attributes, drapery, and style of execution. It was not a little gratifying to discover that these analogous figures were found in a single chapel at Arezzo and in the neighboring church at La Verna, since, on several other grounds, I had already connected the monument with the same locality.

With this clue, we may now proceed to the identification of the standing saints. The first on our left is not, as Cavallucci affirms,⁷ S. Agostino, but S. Donato, the bishop of Arezzo. He appears upon both altar-pieces in the Virgin-chapel at Arezzo, where he may be identified by the presence of the carnivorous beast who devoured him.⁸ In describing one of these altar-pieces, Vasari identifies this bishop as S. Donato.⁹ His identification in this instance could hardly fail to have been correct, as S. Donato was buried in the Cathedral under the high altar, which was figured with reliefs picturing the life of the martyr bishop. This altar attracted the notice of Vasari,¹⁰ and the reliefs were attributed by him to Giovanni Pisano. The same bishop may be re-

³ CAVALLUCCI et MOLINIER, *Les Della Robbia*, Catalogue No. 329; ALINARI, *Cat. of Photos*, No. 6031.

⁴ CAVALLUCCI, *o. c.*, No. 111; ALINARI, No. 9413.

⁵ CAVALLUCCI, *o. c.*, No. 110; ALINARI, No. 9412.

⁶ PASQUI, *o. c.*, p. 143; ALINARI, No. 9410.

⁷ *Les Della Robbia*, p. 283.

⁸ A painting of the martyrdom of S. Donato, by Pietro Benvenuti in the Cathedral of Arezzo, is described by PASQUI, *La Catt. Aret.*, pp. 106-108.

⁹ VASARI, *Vite, etc.*, edit. Milanesi, II, p. 179.

¹⁰ VASARI, *o. c.*, I, p. 310; ALINARI, Nos. 9389-9397.

cognized at La Verna in the grand altar-piece representing the Madonna della Cintola.¹¹ This suggests to us that the retable in the Metropolitan Museum was originally designed for some church or monastery in this region in which S. Donato, bishop of Arezzo, was regarded as patron saint.

Near S. Donato stands S. Francesco, who is clearly enough recognized by the *stigmata* in his hands and feet, by his wounded side and the cross he bears. He was a favorite subject with the Della Robbia,¹² who made many representations of him for Franciscan churches and monasteries. He is appropriately placed by the side of S. Donato,¹³ for was it not in the immediate neighborhood of Arezzo, in the lonely Alvernian mountains, that he received the *stigmata*,¹⁴ and founded one of the most important monasteries of his order? His position in the immediate presence of the risen Virgin is also most appropriate, of whom the gifted Thomas of Celano says: "With unspeakable love did Francis regard the mother of Jesus, because she gave us the Lord of Majesty for our brother; he paid her special songs of praise, poured himself out to her in prayers and brought to her evidences of a love so full and deep that no human tongue can tell of it. But this delights us most; he made her the Intercessor of the Order and placed under her wings, for her everlasting guardianship, the sons whom he must leave behind."¹⁵ The significant position given to S. Francesco in this monument suggests a connection with some Franciscan church or monastery not far from Arezzo.

This supposition is strengthened by the observation that the other standing figures are both Franciscan monks, who have been canonized as saints. The first is undoubtedly S. Bernardino of Siena, who may be recognized from the tablet¹⁶ which he holds in his hand. He was

¹¹ CAVALLUCCI, *o. c.*, No. 335; ALINARI, No. 6027.

¹² CAVALLUCCI mentions thirty-three representations of S. Francesco, viz., Cat. Nos. 7, 55, 96, 108, 122, 132, 135, 139, 167, 168, 177, 187, 188, 199, 216, 222, 273, 304, 311, 317, 319, 326, 329, 332, 335, 344, 345, 394, 444, 471, 473, 481.

¹³ In the Madonna della Cintola at La Verna, S. Francesco appears in the same association.

¹⁴ Mrs. JAMESON, *Legends of the Monastic Orders*, p. 245.

¹⁵ *Opera*, vol. II, III, Cat. 127, p. 280; quoted in THODE, *Franz von Assisi*, p. 103.

¹⁶ Mrs. JAMESON, *Legends, etc.*, p. 293; Lord LINDSAY, *Sketches of the History of Christian Art*, vol. I, p. 147. Both Mrs. Jameson and Lord Lindsay describe these tablets as inscribed with the *VS*; but in this monument the letters are plainly *VHS*, as also in the retable in the chapel of the *Madonna del Soccorso* in the Cathedral of Arezzo. Consequently, we suggest that they may refer to the Virgin as *Virgo*

a Franciscan of the strongest type, and is frequently represented in connection with S. Francesco in the sculptures of the Robbia school. He entered the order of the Observants when it was a small body, but such was the power of his preaching and the vigor of his discipline that, on his death in 1444, the Observants counted 250 cloisters. During the next half-century, this number was largely increased, both in and out of Italy. The chief Franciscan monasteries belonged to this order. S. Bernardino is appropriately represented in the position of honor in this monument, not only because he was Vicar-General of the powerful order of the Observants, but because of his close association with the Franciscan adoration of the Virgin. She had transformed his poor voice into a perfect organ, and he never ceased to be her advocate.¹⁷ As in both altars in the chapel of the Madonna in the Cathedral of Arezzo, so here S. Bernardino is found in connection with S. Donato; an indication that this altar-piece was, in all probability, originally intended for some Observant Franciscan church in or near Arezzo.¹⁸

We are not so fortunate as to be able to identify the fourth saint. His attire indicates that he is a Franciscan. His folded hands and the rosary evince his humility and his adoration of the Virgin. For such qualities, as well as for his preaching and miraculous powers, was S. Antonio of Padua revered. His jurisdiction as Provincial of Romagna extended to the immediate neighborhood of Arezzo. If we wish a more local saint, the inscription on the urn called *il deposito di S. Satiro* in the Cathedral of Arezzo¹⁹ will furnish us a long list of names. But which of these minor saints would have been placed with S. Donato, S. Francesco, and S. Bernardino as a witness of the Assumption of the Blessed Virgin?

Representations of the Assumption, found in ivories and manuscripts as early as the IX to the XII century,²⁰ figure prominently in Francis-

Hominum Succursor, a specifically Franciscan conception emphasized by S. Bernardino. Compare THODE, *Franz von Assisi*, p. 477. If, however, we accept the V as a Y, the traditional interpretation may be preserved. The monogram then reads *Yesus Hominum Salvator*. This rendering of the Greek monogram for IHCOVC is commonly attributed to S. Bernardino: see HULME, *Symbolism in Christian Art*, pp. 51, 52.

¹⁷ WETZER u. WELTE, *Kirchenlexicon*: art. *Bernardhin von Siena*, and *Franciscan-orden*.

¹⁸ The foundation of the church of Sta. Maria delle Grazie, just out of Arezzo, is attributed to S. Bernardino.

¹⁹ PASQUI, *La Catt. Aretina*, pp. 115-17.

²⁰ ROHAULT DE FLEURY, *La Sainte Vierge*, pls. LVIII, LXIII.

can churches from the day when Cimabue established the type by his famous fresco representing the Virgin carried to Heaven in the presence of the Apostles for the choir of S. Francesco at Assisi.²¹ Such compositions were especially developed by the Sienese artists, and seem to have been carried to Arezzo by Pietro Lorenzetti in 1345. In the old Cathedral of S. Donato (Sta. Maria della Pieve), in a fresco on the vault of the apse, he seems to have modified the type by increasing the relative importance of the Apostles.²² This fresco was so much admired as to have led to a painting for the high altar of the same church, in which the Virgin and Child were represented between S. John Baptist and S. Matthew on the one side, and S. John Evangelist and S. Donato on the other.²³ We might expect, therefore, that the Della Robbia monuments of this neighborhood would have preserved this type.²⁴

We are now prepared to consider the question of the authorship and date of our altar-piece. It is hardly necessary to affirm that the monument could not have been made by Luca della Robbia (1400-1482). The framework represents a stage too advanced in architectural decoration, the composition is too elaborate, the proportions too normal, the technical execution too far removed from the marble and bronze style that characterizes Luca's productions even when he worked in terracotta. Besides, we do not know of another altar-piece or of a representation of the Assumption which can with certainty be attributed to Luca. Nor can we attribute it to Giovanni della Robbia (1469-1529): at least it cannot be classed with his polychromatic, rococo works of the sixteenth century, when all his important works were likely to be signed. However, when we bear in mind that the beautiful font in the sacristy of Sta. Maria Novella²⁵ in Florence is an authenticated work of Giovanni of the year 1497; and that it is equally well authenticated that Andrea himself in the year 1515 made a polychromatic and highly pictorial *Presepio* for the Hospice of *Sta. Maria in pian di Mugnone*; ²⁶ it is by no means an easy matter to attribute a monument of this character to its rightful author. Nor do we gain much light if we inquire which of the two was more likely to have been employed to represent the Assumption; for, in the Catalogue of Cavallucci and Molinier, where the attributions are in most instances

²¹ THODE, *o. c.*, p. 472.

²² VASARI, I, p. 474.

²³ VASARI, I, p. 475.

²⁴ Such, in fact, is the case with the Madonna della Cintola at La Verna, and the altar representing the Madonna and Child in the Cathedral of Arezzo.

²⁵ VASARI, II, p. 193.

²⁶ VASARI, II, p. 180.

carefully made, we find the Assumptions equally distributed between the two. These may be arranged as follows :—

I. *Assigned to Andrea and his atelier.*

1. ANDREA.

(a) Tympanum from convent of Sta. Chiara. Academy, Florence. Catalogue No. 98.

(b) Large Retable, La Verna. No. 335.

(c) Retable from Piombino. Metropolitan Museum, New York. No. 481.

2. Attributed by others to ANDREA.

(d) Retable. Brotherhood of S. Francesco, *S. Stefano a Campoli*. No. 304.

3. Atelier of ANDREA.

(e) Portion of a Predella. Academy, Florence. No. 100.

(f) Retable from Poggio Imperiale. S. Kensington Museum. No. 384.

II. *Assigned to Giovanni and his atelier.*

1. GIOVANNI.

(a) Large Tabernacle. Capuchin church, Barga. No. 132.

(b) Large Tabernacle. Convent, Barga. No. 135.

(c) Retable. S. Silvestro, Pisa. No. 229.

2. Attributed by others to GIOVANNI.

(d) Retable. Citta di Castello. No. 162.

(e) Medallion. Loggia of Hospital, Ceppo. No. 235.

3. Atelier of GIOVANNI.

(f) Retable. Collegiate church, Fojano, in Valdichiana. No. 198.

(g) Retable. Franciscan convent, *Sta. Maria a Ripa*. No. 319.

III. *Not assigned to either.*

1. Large relief. S. Bernardino, Aquila. No. 109.

2. Tabernacle. Over door of a house, Poppi. No. 240.

3. Retable. Parish church, Porrena. No. 244.

4. Tympanum. San Giovanni. Oratory of the Virgin. No. 283.

5. Retable. Church at *Sta. Fiora nel Monte Amiata*. No. 312.

6. Large Relief. Spitzer Collection. No. 474.

To this list we may add the organ-gallery relief in the Madonna-chapel, Arezzo Cathedral.

As the material is not before us for a critical review of the attributions of Cavallucci and Molinier, we must attempt some other method of ascertaining the authorship of this monument. In his account of Luca della Robbia, Vasari makes special mention of the works of Andrea. He mentions the marble framework²⁷ for Spinelli's painting at S. Maria delle Grazie, just out of Arezzo; a retable for the chapel of Puccio di Magio²⁸ and a Circumcision²⁹ for the Bacci family in S. Francesco, Arezzo; a retable in Sta. Maria in Grado³⁰ and in the Compagnia della Trinità,³¹ both in Arezzo; also many altar-pieces, not enumerated, in the church and other places of Sasso della Vernia.³² Vasari's testimony in attributing these monuments in and about Arezzo to Andrea has a peculiar value, since Arezzo was his native town, and his meeting, when a boy, with the aged Andrea made a deep impression upon his youthful mind.³³ Now it is these very monuments in the neighborhood of Arezzo that furnish us with strictly analogous compositions,³⁴ containing figures of nearly identical treatment, and set in frameworks of precisely similar character.³⁵ We have already seen how completely we may restore the lost heads by means of others preserved in the monuments of this region. There is scarcely another detail, which, if lost, might not be similarly restored. In the monuments from this district, we notice a singular absence of works attributed to either Luca or Giovanni. Andrea seems to have here enjoyed a monopoly, and that at a time, apparently, when he had attained the highest point in his artistic development.

Is there any way by which we may reach a definite notion of the time when these beautiful works were executed? Unfortunately, the archives of Arezzo and La Verna, if they have anything to reveal, have not yet been published, so we must arrive at our conclusion by some less

²⁷ CAVALLUCCI, No. 114.

²⁸ Probably the Virgin and Child altar-piece, removed to the Madonna-chapel of the Cathedral. See CAVALLUCCI, p. 90, and No. 111.

²⁹ No longer preserved: see VASARI, II, p. 179, No. 2.

³⁰ CAVALLUCCI, No. 115.

³¹ CAVALLUCCI, No. 110; now in Madonna-chapel of the Cathedral.

³² CAVALLUCCI, Nos. 326-338.

³³ VASARI, II, p. 181.

³⁴ Compare the altar-piece of the Virgin and Child and the relief of the Assumption in the Madonna-chapel of the Cathedral at Arezzo; and especially the Madonna della Cintola at La Verna.

³⁵ Compare the retable in the Campo Santo at Arezzo; the Annunciation and the Adoration reliefs at La Verna.

direct process. We are informed by Dr. Bode³⁶ that the chapel for which the Annunciation and the Adoration of the Child at La Verna were made dates from the year 1479. As the figure of S. Francesco at La Verna, of which we have an exact replica on our altar-piece, was designed for a niche in the same chapel, we have thus afforded us an approximate date for our monument. If the retable at Berlin,³⁷ which comes from the region about Arezzo, be correctly assigned to the year 1470, then our altar-piece, which exhibits greater architectural and plastic ability, may well have been the product of Andrea's activity when he had added ten years to his experience. At this time, Luca was an old man of eighty, and Giovanni a mere lad eleven years of age. We may with great security extend the period of Andrea's labors for this region, since it is not until 1489 that we have a record of his labors elsewhere.³⁸ During the decade 1479-1489; we may believe were made many of the monuments with which he enriched the city of Arezzo and its neighborhood. During this period, the youthful Giovanni was serving his apprenticeship and may have assisted his father in many an architectural framework, for in his first authenticated work, the beautiful font in the Sacristy at Sta. Maria Novella (1497), we find mouldings of an elaborate and highly decorated character resembling very closely those which surround Andrea's altar-piece in New York.

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NOTE.—The attribution of this altar-piece to Andrea leads us to assign to Andrea the following works as well: (1) The Assumption in the Madonna-chapel at Arezzo; (2) the S. Francesco at La Verna; (3) the Virgin and Child altar-piece in the Madonna-chapel at Arezzo.

The injury sustained by our monument seems to have been due to anti-Franciscan and especially to anti-Assumption prejudice. We may suppose this to have occurred after its removal from the region of Arezzo, since similar monuments in this locality have remained untouched.

³⁶ *Jahrbuch d. k. pr. Kunstsammlungen*, xvii, p. 207; *Italienische Bildhauer d. Renaissance*, p. 81.

³⁷ BODE, *Beschreibung der Bildwerke der christlichen Epoche*, p. 38.

³⁸ For the *Opera* of the Cathedral at Florence. The Archives at Pistoja (1505), Viterbo (1507-1508), and Pian di Mugnone (1515), witness his activity in various quarters.

INTRODUCTION OF GOTHIC ARCHITECTURE
INTO ITALY
BY THE FRENCH CISTERCIAN MONKS.

IV. MONASTERY OF ARBONA.

[PLATES XXIV, XXV.]

The monastery of Arbona or Arabona in the Abruzzi is not one of the large Cistercian establishments, nor did it have an eventful history; but the period of its construction, and the indecision shown in its transitional architecture have given it a marked place in this series of monuments. Through the liberality of some citizens of the neighboring city of Chieti, it was founded in 1208, and it received at once, in January of that year, a colony of Cistercian monks from their monastery of SS. Vincenzo ed Anastasio in Rome. The first abbot was Albimanus from S. Maria di Ferrara, in Southern Italy, the largest colony of Casamari. The date, 1208, is either that of the foundation or of the completion of the buildings, for their style precludes a later date. Mothes, on what authority does not appear, attributes the greater part of the church to one Stephanus and to the date 1257, and thus accounts for differences in style between the nave, on the one hand, and the transept and apse, on the other, and for the use of bricks for the vaults. This monastery had but a short and uneventful history, and appears not to have founded any colonies. Still, in 1257, the important monastery of S. Stephen *ad rivum maris* was placed under its jurisdiction by Pope Alexander III, having been donated to it by Manfred, prince of Tarentum in the name of Conrad II. Already in the XIV century it fell into decay, and the few words devoted to its subsequent vicissitudes by Schulz (*Note 2*) are sufficiently descriptive.

The church has been already mentioned and illustrated by a number of writers. Janauschek gives a short note on its foundation;¹ Schulz²

¹ *Originum Cisterciensium*, t. I, pp. 215-16: *Abbatia illa, . . . in colle ad Pescaram fluvium, in dioecesi Theatina et Aprutio-citeriore in regno Neapolitano sita atque Ughello teste Theatinorum civium, quorum eleemosynis et pietate originem debuit, nobile monumentum fuit. Fratres, e coenobio SS. Vincentii et Anastasii assumti, quibus B. Albimanus, monachus Ferrariensis sanctimoniae fama clarus, praeeficiebatur, Aram-Bonam Non. Jan.*

first called attention to its architectural interest, and was followed by Schnaase,³ Salazaro,⁴ Mothes,⁵ Bindi,⁶ and Dehio and Bezold,⁷ whose

1208 i. e. loci, quem coenobium illud occupat, et computi ratione habita v Jan. 1209 ingressi sunt (1209 A. R. E. EM. L. La. SC. N; 1208: B. Bi. Vi. M. Na. Du. Pa (XIII Jan.) F, Lubin, Ughelli, D'Avino, Camera; etc.).

(Manr. 1208. VIII. 5.—Jong. VII. 81. N. 75; ej. Origg.—Dousehon.—Ughell. III, 256; VI. 712.—Lubin 22.—Riccio, Bibl. Abruzz. 187.—Campi III. 162, 246.—D'Avino 210.—Camera I. 96)

² *Kunst des Mittelalters in Unteritalien*, II, pp. 35–37: In einiger Entfernung von Chieti den Pescara aufwärts liegt die Cistercienserabtei Sta. Maria d'Arbona oder d'Arbona, welche 1208 von jener Stadt aus gestiftet, mit Mönchen von S. Vincenzo ed Anastasio in Rom besetzt wurde und Albimano von Sta. Maria della Ferraria zum ersten Abte hatte. Im Jahre 1257 vereinigte Papst Alexander IV die Abtei S. Stefano in rivo maris mit ihr. Im Jahre 1380 befand sie sich bereits in Abnahme; von Rom aus wurden Vicare hingesandt; später wurde sie als Commende ausgethan; endlich 1587 kam sie an das Collegium S. Bonaventura in Rom. Nach dem Abschlusse des Concordates von 1818 wurde sie den Patres cruciferi sammt einigen Gütern überwiesen. Wir geben auf Taf. LX. Fig. 1. den Grundriss, Fig. II den Längendurchschnitt und Fig. III das Detail eines Capitäls von dieser Kirche. An der charakteristischen Form des ersten würde man schon ohnehin mit Bestimmtheit erkennen, dass Sta. Maria d'Arbona von Cisterciensern erbaut ist; von den vielen ähnlich angelegten Kirchen desselben Ordens machen wir beispielsweise nur die von Cusamari namhaft, im Kirchenstaate nahe der neapolitanischen Grenze belegen, ferner vor allem das Mutterkloster S. Vincenzo ed Anastasio in Rom. Die Haupteigenthümlichkeit ist der gradlinige Abschluss des Chores und die je zwei anliegenden, gleichfalls gradlinig geschlossenen Seitencapellen, welche sich in jedem Kreuzarm öffnen. Das Langhaus vor dem Kreuze ist nur zwei Joche lang, welche nicht von ganz gleichen Dimensionen sind. Jedenfalls sollte dasselbe eine grössere Ausdehnung erhalten und wurde wegen Ungunst der Zeiten in so dürftiger Weise abgeschlossen. Die kleineren Capellen erscheinen von Osten gesehen als in die Winkel des darüber hoch aufsteigenden Kreuzes gesetzt.] Auf beiden Seiten des Kreuzes befinden sich im Langhause nach Norden und Süden je zwei Fenster im Oberlichte. Die Hauptabsis hat ausser einem Rundbogenfenster noch darüber, wie auch die Stirnwände des Kreuzschiffes, ein Rundfenster; sonst sind alle Fenster an dem Gebäude längliche Rundbogenfenster, wie auch die Scheidebögen der einzelnen Schiffe, während die Kreuzgewölbe durchaus spitzbogig sind. Die letzteren sind auch von Ziegeln construiert, während das Uebrige alles von Stein ist. [Sie dürften einer etwas jüngeren Bauperiode wie die Untertheile der Kirche angehören].—Ueber die Façade läuft in der Mitte der Höhe, wie bei S. Clemente (vgl. Taf. LIV.) ein Rundbogenfries auf Kragsteinen hin. Das Gewölbe in der Kreuzung zwischen Lang- und Querhaus erhebt sich zu einer grösseren Höhe als die übrigen, und ist auch durch eine zweite Rippenkreuzung ausgezeichnet. In der halben Höhe läuft längs der Wände des hohen Chorraumes ein Gesims über wenig voneinander verschiedenen Kragsteinen hin. In den Ecken des Chores stehen schlanke Säulchen als Gewölbeträger. Von der zierlichen Art und Weise der Capitäle, welche sich auf den dünnen, an die Pfeiler gelehnten Halbsäulchen befinden, giebt unser Abbildung Taf. LX, fig. III. ein Beispiel.

³ *Geschichte der bildenden Künste*, VII, 538: Das erste Beispiel französischen Styls werden auch in diesen Gegenden die Cistercienser gegeben haben und vielleicht ist es uns noch in der Kirche des Klosters S. Maria d'Arbona in den Abruzzen erhalten, das im Jahre

remarks are here appended. The last of the authors cited have given hitherto only illustrations, the descriptive text of which has not yet been published.⁸

1208 gestiftet und mit Mönchen aus S. V. ed A. bei R. besetzt wurde, unter denen sich wohl ein französischer Baukundler befinden konnte. Es ist eine vollkommene Cistercienser-Anlage, kreuzförmig, aber neben dem gerade geschlossenen Chore je zwei eben solche etwas kleinere Kapellen, die ganze Kirche mit spitzbogigen Rippengewölben auf starken, von vier Halbsäulen besetzten Pfeilern gedeckt, während Arcaden und Fenster noch rundbogig sind. Nur das ist ungewöhnlich, aber eine leicht erklärbare Folge beschränkter Mittel, dass das Langhaus, das sonst bei den Cisterciensern sehr lang zu sein pflegt, schon mit zwei Jochen schliesst.

⁴ *Studi sui monumenti dell' Italia Meridionale*, II, p. 37: A poche miglia da Chieti presso il fiume Pescara sorgeva nel 1208 la Badia dei Cisterciensi di S. Maria d'Arbona, o di Ara Buona, come si legge nelle antiche carte (UGHELLI, vol. VI, p. 884). A questa Papa Alexandro IV aveva unita l'altra di S. Stefano in riva al mare; ma non tardò molto che la Badia restò deserta di monaci, perciocchè dal medesimo papa vennero richiamati ad abitar la loro antica casa di S. Vincenzo ed Anastasio in Roma. Per tal guisa la fabbrica del grandioso chiostro videsi in poco tempo volgere in decadenza; la chiesa passò in Commenda, e dopo altre vicissitudini, rimase alle cure di alcuni preti regolari per le sacre cerimonie, etc.

⁵ *Die Baukunst des Mittelalters in Italien*, p. 697: 1208 wurde die Cistercienser-Abtei Sa. Maria d'Arbona von Chieti aus gestiftet und mit Mönchen aus S. Vincenzo ed Anastasio besetzt, so dass sowohl von S. Clemente di Casauria aus, wie von Rom aus hier Einfluss sich geltend machen konnte. Der Grundriss ähnelt dem von Fossanuova, jedoch hat das Langschiff nur 2 Joche, ist also nicht länger als das Chor, wodurch wieder Aehnlichkeit mit Lecce und andren longobardischen Kirchen entsteht. Der Sims am Chor hat noch Consolen longobardischer Art, auch die Arkaden sind rund und die Fenster in Langhaus und Chor ebenfalls, selbst das Ostfenster, über welchem, wie über den in den Kreuzgiebeln, ein Radfenster steht. Erst bei der 1257 durch einen Stephanus vorgenommenen Vergrößerung scheinen mir die Seitenschiffe und die Seitencapellen des Chors hinzugefügt zu sein, welche spitze Fenster haben. Die Gewölbe sind sämmtlich spitzbogig in Ziegel ausgeführt und ihre Rippen ruhen auf den höchst zierlichen gothischen Capitülen der an den Pfeilern lehenden Halbsäulen. Wenn diese die Annahme französischen Einflusses zulässig erscheinen lassen, so wird solcher völlig ausgeschlossen bezüglich der Kleinwerke.

⁶ *Monumenti storici ed artistici degli Abruzzi*, 1889, pp. 651-54 and pls. 107, 108, 109.

⁷ *Die Kirchliche Baukunst des Abendlandes*.

⁸ The illustrations of this church hitherto given have been unsatisfactory. The ground-plan in Schulz has been copied by Bindi and Dehio and Bezold, without testing its accuracy, and in general the latter authors rely entirely on the former, who has led them into several errors. In the sections drawn in Schulz, the bays are made to appear much lower and wider than they really are; their windows are too broad and short; their space between the summit of the arch and the bottom of the windows too short. There is, in fact, not as much disproportion between Arbona and Casamari as would appear from Dehio and Bezold's plate 196, Nos. 2 (Arbona) and 3 (Casamari). Other mistakes common to all are: (1) the omission of the string-course below the windows; (2) the closing of the rose-window in the N. transept.

Having been founded from SS. Vincenzo ed Anastasio in Rome, this monument might be supposed to show the same round-arched and tunnel-vaulted style with heavy square piers, such as we find at Casanova, S. Pastore near Rieti, and other colonies of the same parent monastery; and this is certainly in part the case with the magnificent round arches of its nave. But other influences were at work. The first abbot was from Ferrara, a colony of Casamari, the centre of the new pointed style with the ribbed cross-vault. Fossanova had been built; Casamari was in full construction; the neighboring regions of Latium and the Roman sea-coast were becoming dotted with constructions governed by the same principles. Whoever built S. Maria d'Arbona—for the Cistercian order was devoted to the Virgin—if not a French Cistercian architect, was at least one whose work was fundamentally at variance both in principles and details with traditional Italian work. I am inclined to think him a Frenchman, and to see analogies with the style of such French Cistercian constructions as Silvacane and Pontigny. It is important to note such a fact, for in many buildings a new principle, like that of the pointed ribbed cross-vault, is introduced, but the work is handled after national methods that do not harmonize. At S. Maria d'Arbona the profiles of the mouldings, the treatment of the capitals, the proportions of the arches are even more like those of French works than at Fossanova.

The larger part of the monastery has long been destroyed. There remain: (1) the greater part of the church; (2) the east end of the monastery, stretching southward from the church; (3) traces of walls on the south side. There is enough to show that the usual Cistercian arrangement was carried out, including a cemetery in the rear of the church, toward the north.

CHURCH.—Some of those who have mentioned this church⁹ have remarked on the singular fact that it had but two bays to its nave. Such a circumstance would indeed be unique, were it true. The truth is that the nave originally had the usual number of bays, probably seven, as at Fossanova, in view of the fact that the width of the bays is nearly the same in both. At some time, apparently since the Renaissance, the front part of the nave was torn down, either from vandalism or on account of decay, and a makeshift façade erected at the end of the second bay. It is natural to suppose that this happened in about 1587 when the monastery was handed over to the College of S. Bonaventura

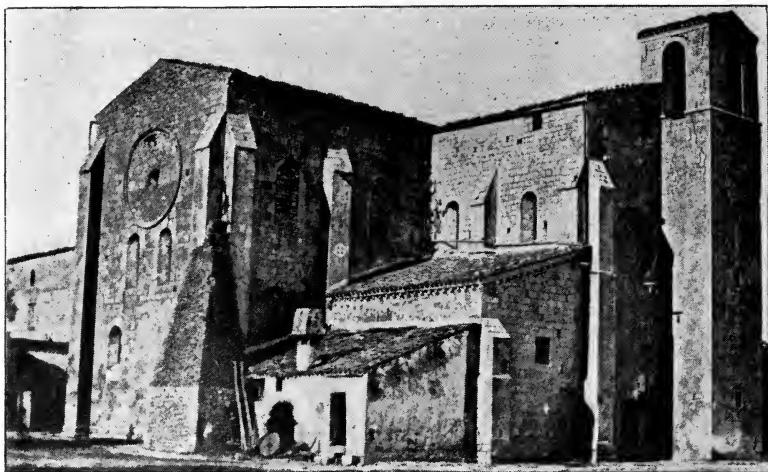
⁹ MOTHEs; SCHNAASE.

in Rome. This was the condition of things at the time of Schulz's visit, in about 1842, unless we are to doubt the exactness of his ground-plan and information. At present only one bay of the nave remains enclosed by a modern façade, yet the ground-plans of Bindi and Dehio and Bezold give two, showing that they do nothing but copy Schulz.

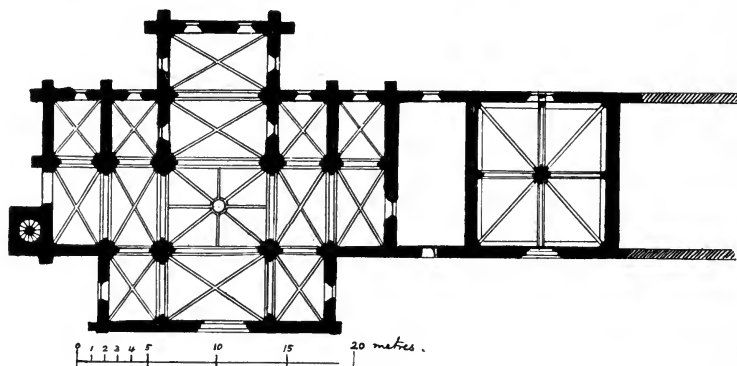
EXTERIOR (PLATE XXV. 1).—The exterior is in bad condition, through the loss of the façade, the destruction of the nave, the closing of many of the windows, and the addition of such excrescences as a brick buttress and a closed shed at the northeast end. One of the original arrangements—that of the tower at the end of the north transept—is also a blot on the symmetry of the structure. The tower takes the place of the customary one over the intersection: it is embedded in the west end of the transept and does not rise far above its roof. The upper story, which alone is pierced with a large round-headed window on three sides, appears to be a restoration. In the centre of the transept-wall, beside the tower, there is a rose-window of developed style: its outer mouldings are extremely rich and heavy on both the exterior and interior, and its radiating colonnettes are twelve in number. A rose-window of larger dimensions was opened in the upper part of the apse but was closed up at some time, apparently on account of the dislocation of the vault which necessitated the strengthening of the walls by means of a heavy buttress, and the closing of the round-headed windows in the side-walls of the apse. The general proportions of the central part of the structure are slender and lofty, the aisles and chapels being low in proportion. A peculiarity not to be found to the same degree at Fossanova or at all at Casamari, is the outward splaying of the windows. The apse was provided with an unusual number of openings—a lower row of three windows, the central one larger and pointed, the others round-headed; a second row of two similar windows; and above them the rose-window. There is no trace on the exterior in support of the notion of Schulz and Mothes, that the vaults were executed at a later date.

INTERIOR (PLATE XXIV).—The effect of the interior is different from that of Fossanova and Casamari, for several reasons, especially the preponderance of the lofty vaults of central nave, apse, and transepts, and the low powerful round arches of the nave. Hence, a lack of unity that is picturesque and a combined effect of height and breadth. The material is travertine, left exposed and carefully finished throughout; brick is used in the construction of the vaults, and

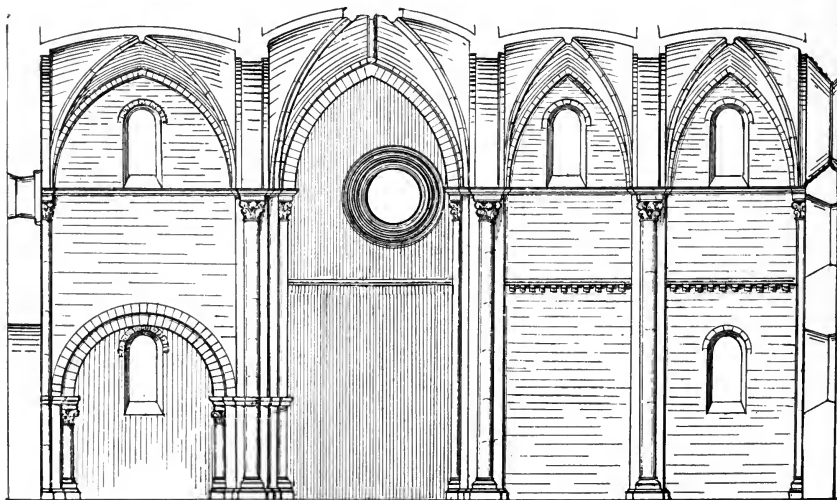




1



2



3

it may also have been used, with a travertine facing, in the walls, as at S. Galgano. I did not think to determine this fact at the time of my visit in 1889. The ground-plan is the usual one (PLATE XXV. 2). The square apse, 8.50 met. wide and 10.70 met. deep, consists of two bays, one of which projects, while the other corresponds to the side-chapels, of which there are two on each side, 4 met. wide and 5 met. deep, opening on the transepts by sharply-pointed arches. The transept measures 6.65 met. and is therefore not so wide as the nave, which measures 8.25 met. between piers. The remaining great arch of the nave has a span of 6.35 met., whereas those of Fossanova measured only about 4 met. However, according to Schulz, the second arch (and consequently all that followed—now destroyed) had a narrower span than the first. This furnishes an interesting analogy to the arrangement in SS. Vincenzo ed Anastasio where the same thing occurs, the arch near the transept having a span far wider than the others, and forming a sort of aesthetic transition from the low arcades of the nave to the lofty transept. It appears to me that the use of round arches should not be regarded as an indication that the nave was earlier in date than the transept, for in the side-aisles the spanning arches are very pointed and narrow and of the same form and style as those that open into the chapels of the transept. Still, I am disposed to believe that the progress of construction was from the façade toward the apse. That a few years, at least, elapsed between the two ends, during which artistic progress was made by the Cistercian builders, is made evident in several ways. One of the windows in the apse, for example, is pointed: at Fossanova (c. 1175) all are round; at Casamari (c. 1210) all are pointed. But where this gradual progress is best shown is in the capitals: those of the nave have still Romanesque elements, which are eliminated at the corner pier of the transept, and the Gothic foliage becomes still more perfected in the apse and chapels. All the capitals are of fine proportions, generous lines and careful workmanship. If any portion of the work belongs to the supposed restoration in the middle of the XIII century—of which I know no proof—it may be the rose-windows in the apse and transept; although we cannot judge of that in the apse, as it has been walled up. Sections are given in PLATE XXV. 3, 4.

A comparison of this interior with that of Fossanova (see vol VI, PL. III) shows that the pointed arches are here more acutely pointed, and do not rest upon such high piers. The greatest advance here is the consistent use of the pointed ribbed cross-vault in a most happy manner.

At present the vault of the remaining bay of the nave is unribbed, but this is due to recent restoration, for Schulz's drawings show that in his time both the bays of the nave had vaults like the rest of the church. The outline of the diagonal ribs of all the vaults shows a large central pear-shaped moulding flanked on each side by scotias and a similar small moulding. High pointed transverse arches separate the vaulting compartments: they are not so low and thick as those of Fossanova, making the vaults less domical, in consequence, and similar to those of Chiaravalle di Castagnola and Casamari, though more acutely-pointed than either. Except in the side-aisles all the wall-ribs are pointed; excessively so in the transept. The ribbed vault over the intersection is octagonal and was crowned by a small lantern: it is more domical than the rest. All the windows are simple small round-headed openings, except three in the apse that are pointed. The piers of the nave are unusually heavy even for the Cistercian style, and their engaged columns, of corresponding size, start from the pavement instead of from the springing of the main arches, where they usually rest on consols. There are two string-courses in the transept and one in the nave and apse; the latter is supported by a line of corbels placed close together. It is not my object to describe anything but the architecture of these Cistercian churches, so that I shall pass over very casually the frescoes and decorative pieces of detached sculpture that the church contains. The editor of Schulz noticed on the painted decoration of one of the vaults of the choir the mutilated inscription [*Ca?*] PVANVS ABBAS ARBONA . . ., which doubtless refers to the frescoes of the apse. Of considerable merit is a Virgin and Child, in a broad Tuscan style, dated 1370 and signed *M(agister) Anton[ius] de Adria fecit*: a painter of Atri of this name is known to have died in 1433.¹⁰ The ancient altar remains; so do two ancient marble sacramental tables placed against the walls of the apse on each side of the altar. Along the north wall stand a fine tabernacle and a very beautiful paschal candlestick, similar to that at S. Clemente di Casauria: they have both been carefully illustrated and described by Schulz¹¹ and Bindi.¹²

MONASTERY AND CHAPTER-HOUSE.—Leaving the interior of the church by the door of the modern façade, we find ourselves in a large open court, still partly walled in and preserving everywhere traces of

¹⁰ BINDI, *op. cit.*, p. 654.

¹¹ *Op. cit.*, p. 37; with inset 67 and pl. LVIII. 1-3; pl. LVIII. 11.

¹² *Op. cit.*, pl. 108.





CISTERCIAN MONASTIC CHURCH OF ARBONA, ITALY. INTERIOR.

the old walls. The first to be noticed are those belonging to the old nave of the church itself, whose foundations could easily be laid bare and the exact dimensions and arrangement ascertained. Extending south from the transept is that part of the old monastery which is not entirely destroyed. The only interesting feature in it is the Chapter-house, measuring nearly eleven metres each way. In its dimensions it approaches very closely to that of Fossanova, though in its lightness it resembles S. Martino near Viterbo. While Fossanova has two central piers, Arbona has but one, and this one is of slenderer proportions. It is formed, on the same principle, of a central column around which are grouped eight shafts to support the vaulting ribs. These shafts are more detached than at Fossanova, and the mouldings are simpler, though very similar. The effect is at present marred because the floor has been raised to within four feet of the capitals. Engaged shafts receive the mouldings of the vault against the wall.

On the next side of the quadrangle stood, as usual, the Refectory, and its exact position is shown by the remains of the lower part of its windows. Further information could doubtless be obtained by slight excavation, which would disclose the dimensions and plan of the quadrangle, and the size and number of bays of the nave of the church.¹³

From the foregoing description, it will be clear that the church is wanting in the unity of style that distinguishes other Cistercian monuments of this period; but this very lack increases rather than diminishes its interest, because it remains a standing memorial of the rapid changes that took place in Cistercian architecture during the first decade of the XIII century. Its geographical position is solitary: it appears to stand alone as a champion of the new style in the Abruzzi; when Gothic took root in this region it was later in the century, and through other influences, both of the Mendicant orders and of the new Angevin style of the South.

A. L. FROTHINGHAM, JR.

Princeton, N. J.,
December, 1891.

N. B.—I omitted to acknowledge in the previous article of this series my indebtedness to Dehio and Bezold for the two sections of Castagnola (vol. VII, pl. XIII. 1, 2).

¹³ My visit to Arbona was made in July, 1889, and my photographs and notes were made at that time.

A "MENSA PONDERARIA" FROM ASSOS.

Among the objects from Assos acquired by the Boston Museum of Fine Arts is a block of white marble containing five bowl-shaped cavities. Similar monuments have been found at several places in the ancient Greek and Roman world, the one most generally known being that from Pompeii, now in the Museum of Naples.¹ Neither the Greek nor the Latin name of these objects is known; the names *σήκωμα* and *mensa ponderaria*, now often applied, are both of them unsupported by ancient usage. But their purpose is clear. They contained standard measures of capacity, by comparison with which the measures used by dealers could be gauged. They were therefore set up in some public place, often in an agora or forum. Mr. J. T. Clarke, who was in charge of the American investigations at Assos, and who has given his cordial consent to the present publication, has kindly written me in regard to the Assian *mensa* as follows: "The block in question was found in a large *chûte* of *débris* beneath, *i. e.*, to the south of, the main retaining-wall of the agora at Assos. From this position it may naturally be concluded that the table was once erected as a public standard upon this market-place."

One corner of the block was broken off, presumably before its discovery,² but has been cemented on in the Museum. The dimensions

¹ Descriptions and illustrations of several of these monuments have been published. The following list is as complete as I can make it: one from Athens, *Ἐφημερίς Ἀρχαιολογική*, 1862, p. 23, *πίναξ θ* (KOUMANOUDES); one from Ushak in Phrygia, *Mémoires Couronnés de l'Académie Royale de Belgique*, vol. XXVII (WAGENER); one from Gytheion in Laconia, *Philologus*, XXIX, pp. 700 ff. (CARL CURTIUS), and Lebas, *Voyage archéologique*, Inscriptions II, note on 241 b (FOUCART); one from Pompeii, often published, best in the *Giornale degli Scavi*, N. S. II, pp. 144 ff. Tav. VI (MANCINI); one from Minturnae, *ibid.*, and also *Mémoires de la Société des Antiquaires de France*, vol. 25 (=EGGER, *Mémoires d'histoire ancienne*, pp. 197 ff.); an object probably of this class found at Anthedon in Boiotia and published in this JOURNAL, vol. VI (1890), p. 100. Other examples, of which brief descriptions without illustrations exist, are: one, unfinished, from Athens, KEKULÉ, *Bildwerke des Theseions*, No. 364; one from Ganos and two from Panidon in European Turkey, *Archives des Missions Scientifiques et Littéraires*, 2^{me} Série 6 (1871), pp. 466 ff. (DUMONT); one from Naxos, referred to by Dumont in Lebas, *loc. cit.*; one from Tivoli, *Athenæum*, 1883, p. 513 (LANCIANI).

² This conjecture is confirmed by Mr. F. H. Bacon, of the Expedition.

are as follows: length 1.11 metres, breadth 0.455 m., height at the ends 0.21 m. Except for 0.14 m. at one end and 0.155 m. at the other, the long sides of the block are roughly bevelled off toward the middle, leaving the height of the long sides 0.15 m. The unbevelled ends rested upon upright supports, to which they were secured with the help of two dowel-holes, which may be seen on the bottom of the block, at diagonally opposite corners. When thus set up the table was exposed on all four sides. The upper surface has a raised margin about one centimetre in height, and each bowl has a raised rim. A roughly-cut groove runs from the rim of *D* to the corner of the block (*Figure 7*).

Considering the purpose served by the five bowls, one might expect them to be finished with extreme nicety. On the contrary, their concave surfaces are rough, their rims are not level, and there are no discoverable marks to indicate the heights to which they were to be filled. Mr. Edward Robinson, the Curator of Classical Antiquities in the Museum, was the first to note these facts and to suggest their almost certain explanation. These cavities, namely, were originally lined with metal, doubtless bronze. No traces remain of the metal or of any means of riveting it to the marble, but it must have continued down through the escape-holes and have been bent back against the surfaces of the circular sinkings around these holes (see *Figure 7*). There were, of course, removable stoppers and some means of indicating how high the vessels were to be filled. The existence of similar metal linings in the cavities of the Pompeian *mensa* has been made probable by Mancini, and is assumed as a matter of course by Lanciani for the one from Tivoli. Probably some, if not all, of the previously known Greek tables were similarly fitted up. The one from Athens, for example, has the surfaces of its bowls rough, while in some other cases there are no outlets, a state of things which points to the use of removable vessels, as Mancini suggests for the *mensa* from Minturnae.

As is the case with the tables from Ushak, Gytheion and Ganos, and with that from Pompeii in its original form, the cavities of our table are accompanied by inscriptions naming the measures. All but one of these are engraved to be read from one side, which may therefore be called the front; the one exception is to be read from the opposite side. The first, in front of *A* (see *Fig.*), nearly effaced, but still legible, is ΚΟΤ, *i. e.*, κοτ(ύλη). In front of *B* the surface is chipped away. The inscription here may have been ΤΠΙ, *i. e.*, τρι(κότυλον), as on the Ganos table. In front of *C* we have ▨□Ι. Although no cross-bar at

the top of the last letter can be made out, this must be read [ΞΕ] [Τ], *i. e.*, ξέστ(ης). In front of *D* we have ΧΟΙ, *i. e.*, χοῖ(νιξ); and, behind *E*, ΤΠΙ, *i. e.*, τρι(χολνικον). These inscriptions may, I should judge, have been cut by the same hand. The form [Τ], which is the most distinctive thing about them, points to a date not earlier than the time of Augustus. There are other letters, and these more deeply cut, *viz.*, ΕΔΦΑ (I do not know in what order they should be read) on the rim of *E*, and ΤΠΙΑ in front of it. The letters ΤΠΙ of ΤΠΙΑ differ from all others on the stone in having strongly marked apices, and they are besides more deeply cut than the adjacent Α. ΤΠΙΑ is probably τρία, but, why the form is neuter, I do not know; and the letters on the rim are totally enigmatical to me. Finally, there remain to be mentioned five straight marks, irregularly placed, to the left of and a little below the letters ΧΟΙ. If these are significant marks at all, which I strongly doubt, perhaps they should be read ΠΙΙΙ, *i. e.*, 8. But one does not expect to find this system of numerical notation in an inscription of the imperial period. The most careful search has failed to reveal any other traces of letters anywhere on the block.

The *kotyle* and the *vestes* (*i. e.*, *sextarius*) were used for both dry and liquid measure; the *choenix*, under that name, only for dry measure. The 3-*choenix* measure is exactly equal to the χοῦς, a common unit of liquid measure, and it is noteworthy that it is not called by that name. *D* and *E*, therefore, if not the other bowls as well, were designed to be standards of dry measure. Now the outlets are too small to allow the easy escape of flour or grain, the largest, that of *D*, being only about 0.028 m. in diameter, and that without the metal lining. Moreover, the groove cut on the surface of the block was obviously to drain off spilled liquid. It would appear, therefore, that the method of testing, say, a *choenix*-measure to be used in buying and selling, was to fill it with water and then to pour the water into the standard *choenix*-measure of the table.

The capacities in litres of the five cavities, filled to the brim, are approximately as follows: *A*, 0.49; *B*, 1; *C*, 0.795; *D*, 1.49; *E*, 4.62. It seems altogether probable that the intended measures, *i. e.*, the measures as determined on the bronze linings, conformed to the prevalent Attic and Roman standard, and were therefore as follows: *A*, 0.2736; *B*, 0.821; *C*, 0.547; *D*, 1.094; *E*, 3.283: for both the name and the actual capacity of *C* suggest that it was intended to hold twice as much as *A*. In that case, *B* must have been intended to hold two and a half

or three times as much as *A*. The former is an unlikely measure, the latter, the *trikotylon*, a likely one. On this supposition, the *kotyle* of our table could not have varied much from the Attic standard. It could not, for example, have been equal to the Aeginetan (0.397 l.) or to the Pontic (0.365 l.) *kotyle*. And a consideration of the diameters of the bowls will show that, on the assumption of the Attic standard, the several measures, as determined on the bronze linings, would have come about equally near to the surface of the table.

F. B. TARBELL.

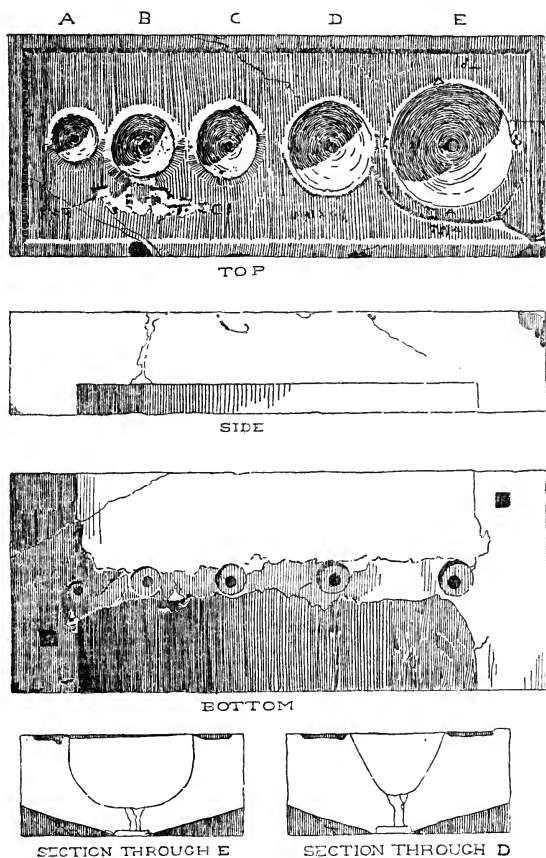


FIG. 7.—*Mensa Ponderaria* from Assos.

NOTES.

NOTES FROM SYRIA.

I. HITTITE RUINS.

In November, 1890, while going from Biredjik to Aleppo, about fifteen hours from Aleppo, after passing Zambûr and crossing the Sadjoûr very near where Hadjivali, on Kiepert's map of Turkey is situated, I saw on the right, a few minutes' ride from the road, an extensive, low ruin, so covered with basalt stones, large and small, that it resembled an immense Moslem graveyard.

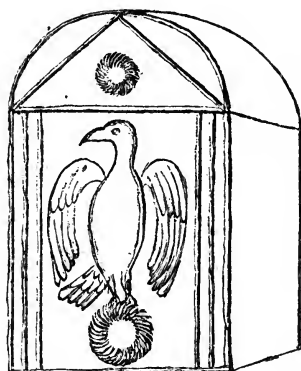


FIG. 8.

On examination I found a few graves, but in addition a large ruin. I did not have time to explore it, but the remains of workmanship upon the stones suggested that it must be a Hittite ruin of some importance, especially as Zambûr, the nearest village to it, has yielded some Hittite remains. The most prominent of the stones stood upright, partly buried in the ground, facing nearly south. It stood about four feet out of the ground, was over two feet wide and very nearly one foot and a half thick, rounded on the top and back, and bearing

the figure of an eagle standing upon a conventional wreath, and inclosed in lines, all in prominent relief. The village close by is called Khalooghlo, and is composed of about twenty Mohammedan families.

Observing fresh holes in the ground about halfway between the ruin and the village, I made some inquiries about them from the natives following me, and I was told that they were digging for hewn stones for the gateways of their houses. Several of these stones I saw which had been dragged halfway toward the village. I questioned whether that was not the city-wall, especially as it was some distance outside of the ruin. I looked for a mound but saw none. The illustration is from a drawing made at the time (*Figure 8*).

II. GREEK RUINS.

I also give from my note-book a short Greek inscription. It is engraved upon a single stone and is on the inside of the upper threshold of the entrance to an ancient ruined church, in a village called Rahaba. This village is about half an hour west of Tokat between Tokat and Turmanin on Kiepert's map, on the road from Aleppo to Hammam: there is another village beyond it called Hazreh about three-quarters of an hour east of Turmanin. Both of these villages are in the region of Djebel Siman: neither of them is on Kiepert's map, but both are built in the midst of ruins which evidently mark sites of some ancient Greek towns or cities. They seemed to me exceedingly interesting, especially Rahaba, where a magnificent Greek arch built of solid square stones is still standing in perfect condition and more than twenty feet in height. I believe that further investigation at these places would have resulted profitably. These villages have, perhaps, fifty houses each, the inhabitants being Mohammedans.

W Δ E C I □ Y
 W Δ I Δ
 T □ Y Θ Λ Φ
 E T □ Y C

᾽Οδεσίου (?)
 ἐνδ(ικτιῶνος) ἰδ
 τοῦ θλφ
 ἔτους

DANIEL Z. NOORIAN.

THE BERLIN TABLET NO. 1813.

In the *Gazette archéologique* of 1888 (pl. 31), one of the Attic tablets with black figures, relating to funeral ceremonies, was published and explained by M. Collignon (*Plaques funéraires de terre cuite peintes trouvées à Athènes*) in the same way as by Furtwängler in his catalogue of the Berlin vases (No. 1813). The principal figure is a woman, sitting in the middle of the picture, distinguished from the other persons by a large and beautifully ornamented *himation*, which is drawn over her head. She inclines her head forward, and is just lifting her left hand up to her chin, as if meditating and mourning. In front of her, as well as behind her, there are sitting two other women on each side. They calmly look at the woman in the centre; the two close to her lift up one hand to express inward commotion. In the background three standing women are represented;

the one in the middle is delivering up a child, apparently a girl, to the woman on the right. That on the left had held it before, her arms covered with a cloth being still stretched out. We refrain from a more detailed description, as this is sufficient for our purpose.

Of course, the painting should be related to some funeral ceremony. Furtwängler, who is followed by M. Collignon, explains all the women as the family or friends of a deceased woman, whose child, the mother having died, is given up to some relation. The woman in the middle is interpreted to be the nearest relation to the deceased one, her mother, because she occupies the first place in the representation and differs from the rest by her dress. The women are supposed to be mourning and wailing in the house of the dead woman, while the remains of the deceased one are conducted to the last resting-place.

In this explanation we find two mistakes. In the first place, it would be strange, that the child of the dead woman should be surrendered to a person of inferior position in the background instead of to her nearest relation, who, before all others, ought to take charge of the nursing and education of the child. In the second place, we know, from literature, that the women took part in the funeral procession, also in ancient times, as is proved, *e. g.*, by the celebrated Dipylon-vase, representing a funeral (*Monumenti dell' Inst.*, IX, pls. 39, 40). That the family or friends assembled in the house of mourning during or after the procession, as in our days, we do not read anywhere. Therefore the explanation given above cannot be a satisfactory one.

To find the right one, we have to regard the use made of these tablets. F. Wolters, in the *Εφημερίς ἀρχαιολογική* of 1889, has proved conclusively that these tablets were fastened to a sepulchre. We may conceive a wooden monument made in imitation of a small temple; these tablets may have been fastened on to the frieze by little nails, to which the holes in the tablets correspond. These sepulchres were, in later times, replaced by the well-known magnificent stone monuments. Here we find reliefs, mostly representing the deceased (man or woman) sitting in a room, either engaged in some favorite work or merely meditating mournfully.¹ Why should we hesitate to explain our tablet in the same way? The main figure is not the mother or any other relation of the deceased one, but the deceased one herself.

¹ For instance, the so-called Leucothea-relief of Attic origin (BAUMEISTER, *Denkmäler des klassischen Altertums*, No. 420) represents a mother, who is holding a child on her lap in the presence of adoring persons.

She is dressed in a beautiful garment, as the dead used to be ; still sitting in her own room, where she spent so many days of happiness, she forbodes her premature death and bends her head, full of grief. Her friends and relations, surrounding her, are mourning with her, and the child, as if already deprived of her natural mother, is taken from the arms of her nurse and given to her new foster-mother. So we find the same trait here, as in the reliefs—the same remarkable combination of life and death.

Supposing this explanation to be the true one, we have found a new link in a long chain. The same subject that we see so beautifully varied in a great number of Attic reliefs for so many years, at the time when wooden architecture, aided by terracotta, had been superseded by stone architecture and sculpture—the same subject had already in former times (about the year 530 B. C.) interested and engaged the artisans who had the task of ornamenting a grave with a monument. The sculptors of later times have only translated a touching idea of their predecessors into their own language.

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CISTERCIAN GOTHIC ARCHITECTURE IN ITALY.

A QUESTION OF LITERARY PRIORITY.

I began publishing, about two years ago, a series of papers on the origin of Gothic architecture in Italy, which I ascribed to the French monks of the Cistercian order who came from Burgundy and established monasteries in Italy during the twelfth and thirteenth centuries. These articles were in anticipation of a volume which I then announced, and which was to treat of the entire subject. Since then, and partly by reason of these articles, considerable interest has been awakened, notably among specialists, in this new and unexpected chapter in the history of art. This interest is being in one case manifested in a way that is not in harmony with the generally-received rules of scientific courtesy: hence this note. Its object is to call attention to my right to priority in all but one of the following conclusions: (1) The earliest Gothic churches in Italy were erected by the French Cistercian monks. (2) They are free from Italian modifications. (3) They put back the origin of Gothic in Italy about a half-century—to about 1170. (4)

They reflect very quickly the architectural changes that take place in France, especially in Burgundy, showing unbroken intercourse with the mother-country. In so far as I am aware, no writer had preceded me in these conclusions. The one exception (concl. (1)) is to be found in the *Mostra della Città di Roma* published in 1884, which I read long after I had begun my study of these monuments, in 1881. There we find the following general statement made in connection with the Cistercian origin of the monasteries of Fossanova, Casamari and S. Martino (p. 142): *Egli è certo che per mezzo de' monaci cisterciensi fu importato in Italia lo stile ogivale monastico, all'effetto di fondare nuove case religiose differenti dalla casa madre di Citeaux.* While this shows a divination of the French origin, no study is made of the vaulting system, which is the main question at issue, and no claim is made that these buildings are earlier than the thirteenth century.

Among those who have expressed agreement is principally Dr. Dehio (the author of the great work on mediæval architecture now being issued), who published during 1891, in the *Jahrbuch d. königl. preuss. Kunstsammlungen* (vol. XII, p. 91), an interesting article on the Cistercian monasteries of Pontigny in Burgundy and Fossanova in the Papal States. He descants on the astonishing fact, that the origin of Gothic architecture in Italy should now be made a half-century earlier, and closes with a series of conclusions almost identical with those given in my article on Fossanova in 1890 (*JOURNAL*, vol. VI, pp. 1-46), an article which he mentions as having read.

The case to which I allude is this: a certain M. Enlart, a *pensionnaire* at the French School in Rome, has written a thesis on Early Gothic Architecture in Italy to prove (as I hope that I had already done) that it was introduced by the French Cistercians from Burgundy. This work has lately been presented unfinished to the French Académie des Inscriptions et Belles-Lettres. In the meantime, in the *Mélanges d'Archéologie et d'histoire* for June, 1891, he publishes a paper on the monastery of S. Galgano near Siena, concerned not with its architecture but with its documents. He incidentally mentions, in it, his unfinished work, and in a note has the following charming touch—referring to the origins of Gothic in Italy, he says: “Although this interesting subject is being touched upon (*effleuré!*) in some monographs that are being published in a *foreign review*, the numerous documents I have . . . will allow me to publish shortly a study which will, I hope, be considered as *serious* and *entirely new* on this important and, so to





STATUE OF RAMESES THE GREAT FROM HERAKLEOPOLIS, IN THE MUSEUM
OF THE UNIVERSITY OF PENNSYLVANIA.

speak, inedited chapter in the history of art." How delightfully vague to term the *American Journal of Archaeology* "a foreign review," and to refer to "some monographs," as if afraid to give his readers a clue: and then, the choice sarcasm, as he expresses the hope that his study will be taken "seriously." His idea of what is inedited seems to be extremely elastic. To describe in detail from personal inspection, to give measurements, to publish ground-plans, cross-sections, bays, details, photographic views of interior and exterior of these early Cistercian Gothic churches in Italy, does not appear, in the opinion of this M. Enlart, to take them out of the class of inedited monuments. I think, however, that it can hardly be denied that monuments thus published in the *American Journal of Archaeology* and fully illustrated are not inedited.

A. L. FROTHINGHAM, JR.

TWO EGYPTIAN MONUMENTS FROM THE SITE OF HERAKLEOPOLIS.

[PLATE XXVI.]

I.—The Museum of the University of Pennsylvania has lately received from the Egypt Exploration Fund a fine painted statue of Rameses the Great, of heroic size. The monarch is represented seated in the conventional attitude, and wearing on his head a black and yellow striped khaft, the colors of which are still plainly discernible. The monument is of siliceous-sandstone or quartzite; it is eight feet high, and is in three pieces, having been broken at the waist and neck. The fractures, however, are of such character as to be scarcely perceptible now that the fragments are adjusted. The lower piece alone, including the base and legs of the statue, weighs 6700 lbs. The nose is damaged, the beard is broken off, and the arms are mutilated; otherwise the figure is in a fairly good state of preservation, and retains its aspect of calm grandeur and dignity.

The hieroglyphs, carved on the sides and back of the throne and giving the names and titles of the Pharaoh, are large and beautifully cut (nearly half an inch deep) in the best style of the period. The titles are the usual ones. First comes the standard or Ka-name: "The crowned Horos," "the Mighty Bull, son of Ptah, or of Atum" or, according to variants on the different sides of the monument, beloved

of "Maat," of "Amon," of "Ra." Then come the king's other names and royal titles: "Son of Ra," "Lord of Diadems," "Ramessu-Miamon," "Userma Sotep or Ra," "Giving life like Ra"—and running along the base: "Lord of the two Lands," "Userma Sotep or Ra," "Son of Ra," "Lord of Diadems," "Ramessu-Miamon" beloved of Har-Shefi; the last being the ram-headed form of Horos or Osiris, to whom was dedicated the temple in which the statue was found. Above the back of the throne is the cartouche "Userma Sotep or Ra, Everlasting."

It may be interesting to note a peculiarity which was accidentally brought to light. The stone-cutter, who more than three millenniums ago carved the inscriptions, by mistake cut the hieroglyphs composing the group for "Son of Ra" (*i. e.*, the goose and sun-disk which surmount the royal cartouches on the left side of the throne) all facing one way instead of dividing them, as he had the cartouches and standards themselves, into two registers each facing the outer edge of the stone, and therefore reading one from right to left and the other from left to right. Perceiving his error, he filled up the faulty characters with mortar, and having thus made a new surface for himself he cut into it a new goose and disk which he afterward carefully painted over to match the color of the stone. In the course of its vicissitudes, the paint having become rubbed off the great monolith, the softer mortar was left exposed and the carving on it became defaced. After the statue had been unboxed in the Museum of the University, one of the employés, seeing a dirty-gray substance filling some hieroglyphs, and thinking that an accident had brought it there, spent much time and labor, in my absence, in picking it out, thus blunderingly exposing to light the former blunder of the ancient subject of Rameses. This is perhaps to be regretted, as the cartouche now appears surmounted by two disks instead of one, and by a nondescript creature composed of the elongated but headless body of a goose, provided with a tail at each end and with a superfluity of legs: two coming and two going.

II.—Another valuable addition to the University-collection of the Museum, also made through the Egypt Exploration Fund, is a fine column of syenite 14 ft. 8 ins. high and 2 ft. 3 ins. in diameter. It was originally capped by a palm-leaf capital that brought its total height to 17 ft., as is shown by a similar shaft which was recovered, complete and uninjured, from the same hall. The decoration is divided into three registers, and the palms of the missing capital begin to be

indicated at the top. Scenes of offerings made to the gods by Rameses II occupy the middle register. These figures, the tallest of which is 3 ft. 4 ins. high, are engraved in admirable style, and are wonderfully preserved. Above and below, the names and titles of the Pharaoh are given in fine deep-cut hieroglyphs. No sign of weathering is perceptible, and the syenite still retains its high polish, if not to the eye, at least to the touch.

A peculiarity of the decoration lies in the fact that the vertical lines of cartouches which adorn the lowest register of the shaft are alternately cut in deep bold intaglio, about $\frac{1}{2}$ inch deep, and in lines of similar but scarcely indicated hieroglyphs. Indeed, so faint are these as to have led me to suppose, before the column had been entirely unboxed and when only one side of its surface was displayed to view, that it had, at some time, been exposed to the sand-blast which had worn away the sculpture.¹ Upon close inspection, they turned out to contain the names of Menepthah Hotepthima, Ba-n-Ra Meri-neteriu, the son and successor of Rameses II, who had caused his cartouches to be thus scratched upon the columns of the temple erected by his great father.

The shaft is broken into two pieces, but the break is so clean that, in this case as in that of the statue, it has been possible to reconstruct the monument by simply adjusting the upper part on to the lower and, without securing it in any way, it stands firmly held by its own weight.

Both monuments came from the Mound of Henassieh, which lies seventy-three miles south of Cairo, near the Bahr-Yussuf. It was explored during the winter of 1891 by Mr. Edouard Naville, under the auspices of the Egypt Exploration Fund. Under this mound, at a depth of some 20 ft. below the surface, lay the ruins of the great temple of Har-Shefi, the ram-headed god of Ha-Khenensu, the Herakleopolis of the Greeks, and the seat of Egyptian Government under the ix and x dynasties of Manetho. These dynasties ruled over Egypt during so obscure a period of its history, and have left so few traces, that their independent existence had been doubted. The reality of their supremacy was however established some years ago through the admirable labors of Mr. F. L. Griffith² who, among the rock-cut hypo-

¹ Dr. Howard H. Furness, however, suggested that this might be intentional—and his opinion was afterward proved to be correct, when, the column having been unpacked, the vertical rows of fine sculpture were found to alternate with the others.

² *Sûd and Der Rifeh*; Trübner & Co., London, 1889.

geia of Siût, identified the tombs of some of their great vassals, and who published texts in which these kings of Herakleopolis were mentioned and in which even the name of one of them, *Merkara*, was given. These important inscriptions whilst furnishing an entirely new chapter of Egyptian history revealed a period of political development that serves as an introduction to the establishment of the first Theban Empire. The kings of Herakleopolis are here shown to have been engaged at this time in continual warfare with the great lords of the South whose encroachments were, even then, constantly threatening the supremacy of their house. And in this ever-renewed struggle, the lords of Siût played the part of loyal lieges and rendered the crown valuable services which won for them the consideration and gratitude of the sovereign. During intervals of peace, these great vassals devoted most of their attention to works of irrigation and of canalization which herald, as it were, the great public works of the XII dynasty.³

The recovery of the hitherto-missing traces of the kings of this period had raised the hope that the excavation of the mound in which the ruins of their ancient capital lay buried would yield important scientific material that must throw light upon the history of the Old Empire.⁴ It was here (the texts tell us) that Khati II, who ruled over Siût under Merkara, was fêted with public rejoicings when, at the head of the victorious Nile-squadron, he landed on his return from a successful southern campaign. But, although the temple must have existed from remote antiquity, the oldest remains found among the ruins date from the reign of Rameses II, who rebuilt this important sanctuary. At least, the only remains found *in situ* by Mr. Naville were the ruins of the vestibule to a side entrance, in the construction of which some blocks of a former edifice of the reign of Usertesen II had been used. According to a communication made by Miss Edwards to the Egyptian Committee of the Department of Archæology of the University of Penna. in the summer of 1891, this hall was 95½ feet long, and on three sides of it was a basement of hard limestone inscribed with hieroglyphs. Here were recovered six columns of granite such as the one above-described, as well as the statue of Rameses II and a few other monuments. Beyond this side entrance, however, enough traces were found to warrant the conclusion arrived at by the explorers, that the

³ MASPERO, *Revue critique d'Histoire et de Littérature*, Dec. 1, 1889.

⁴ F. L. GRIFFITH, *Siût*, Tomb No. v; MASPERO, *loc. cit.*

sanctuary was one of considerable size. As already stated by Miss Edwards⁵ some months ago, the site was quarried during millenniums, and the stones of the ancient structure, even when they had escaped being burnt up in the lime-kiln, had served as building-material for the erection of Roman temples and Coptic churches, the fine ruins of which were discovered over-laying the older shrine.

It is probable that the hardness of the material out of which our monuments are carved saved them from a similar fate. At my request, Dr. George A. Koenig⁶ kindly consented to analyze the stone of the above-mentioned statue and the result is, I think, sufficiently interesting to be given here at length in his own words: "The statue of Rameses II, now in the Museum of the University, is carved in quartzite. The rock may otherwise be described as a siliceous sandstone. This means that the rolled and rounded fragments of rock-crystal or beach-sands have been cemented by their own substance, *i. e.*, dissolved silicon oxide. Grains of rosequartz and amethyst are observed among the colorless fragments; there are yellowish and brownish streaks and patches owing to infiltration of ferric hydrate. The interstices between the grains are only partly filled with the cement and thus the rock is filled with numerous cavities, easily seen by means of a pocket lens. The presence of these cavities, no doubt, much facilitated the impact of the chisel into this hardest of all rocks. Granite is slowly destroyed by air and water, but quartzite is indestructible except by frost, in Egypt unknown."

S. Y. STEVENSON,
Curator of Egyptian Section
Museum of the University of Penna.

⁵ Letter published in *Biblia*, Dec. 1, 1891.

⁶ Professor of Metallurgy, Mineralogy and Mining, University of Penna.

REVIEWS AND NOTICES OF BOOKS.

AUG. AUDOLLENT. *Mission épigraphique en Algérie* (Extract from *Mélanges d'Archéologie et d'Histoire*, published by the French School at Rome). Pp. 196. Rome, 1890.

This publication is the first fruit of the researches of the French School at Rome on African soil. MM. Audolent and Letaille, in a journey lasting less than three months, collected more than 150 inscriptions, some of which are important for the history of Algeria and Tunisia in both Christian and pagan times. M. Audolent has studied these inscriptions with great care; his restorations are apt and his comments excellent, though his facsimiles leave much to be desired. It is to be hoped that the School will continue its African researches; they are sure to yield important results.—R. CAGNAT, in *Rev. Critique*, 1891, No. 15.

W. BODE. *Die italienische Plastik* (Handbücher der königlichen Museen zu Berlin). 8vo, pp. XII, 190; cuts. Berlin, 1891; Spemann.

This book forms the introductory volume of a series of official Handbooks projected and written by the authorities of the Royal Museums at Berlin—somewhat after the pattern of the Art Handbooks of the South Kensington Museum—mainly for the use of visitors to the Berlin collections, though due heed has been paid to the general aspects of the subjects in hand, and in particular to the results of recent investigations in the departments concerned. For this volume no better writer could have been chosen than W. Bode, who may be said to have called the Berlin collection of Italian sculpture into existence, and to have so developed it that it scarcely has an equal outside of Italy. Into this gallery have been gathered notable examples not only of the art of the Renaissance but also of that of the early and late Middle Ages. This rich series furnishes the author with abundant material for illustration in his historical chapters: indeed, the history of Italian sculpture owes a great debt to Bode. The plan of these handbooks excludes the citation of critical apparatus, but the author has shown a commendable thoroughness and completeness of treatment. Thus, we here find adequate discussion not only of Donatello, Della Robbia, Verrocchio, and others of the Tuscan school, but also of many artists of the lesser local schools of central and northern Italy; of the masters of the Renaissance and of the times immediately preceding and following. The author's extensive knowledge of his subject and of the inter-relations of the

several forms of plastic art, from the grandest sepulchral monuments to the handiwork of the goldsmith, is amply drawn upon and gives occasion to many happy remarks.—H. WEIZSACKER, in *D. Literaturzeitung*, 1892, No. 6.

ORIENTAL ARCHÆOLOGY.

PLEYTE-ABEL. *Zur Geschichte der Hieroglyphenschrift*, von W.

PLEYTE, Conservator am Niederländischen Reichsmuseum zu Leyden. Nach dem Holländischen von CARL ABEL. 8vo, pp. 48. Leipzig, 1890; W. Friedrich.

The public owes much to Abel for making more generally accessible, in his excellent German translation, a series of important articles on the hieroglyphic script, written by Pleyte for a Dutch educational journal. The book is full of new and ingenious observations, and is written in an attractive style. The several steps by which hieroglyphic script passed from an ideographic to an alphabetic character are clearly and skilfully traced.—G. MASPERO, in *Rev. Critique*, 1891, No. 8.

OTTO PUCHSTEIN. *Pseudohethitische Kunst*, ein Vortrag. 8vo, pp. 22. Berlin, 1890; D. Reimer. 1 Mark.

In this, his inaugural lecture [as docent at Berlin University], Puchstein controverts the currently accepted view, first urged by Sayce, that the so-called "Hittite" monuments are the work of people mentioned in Babylonian and Egyptian monuments as powerful in Northern Syria between the fourteenth and twelfth centuries B. C. He divides the monuments into two groups, the younger of which, showing Assyrian influence, cannot be older than 700 B. C., at about which time Sargon subdued to Assyria the regions wherein they occur. The older group (*e. g.*, the sculptures from Sindjirli) show no Assyrian traces, and must therefore be earlier than 700 B. C., but probably not more than one or at most two centuries earlier. Puchstein's main argument is based on the treatment of the type of the griffin (see Furtwängler, *s. v.*, in Roscher's *Lexikon*), and appears to be conclusive. The sculptures at Uejük, in Kappadokia, belong between 850 and 600 B. C.: those of Boghaskoï are later than the foregoing; the reliefs of Ibriz belong to the seventh century B. C.; and the two figures near Nymphi between Sardeis and Ephesos (according to Herodotos, monuments set up by Sesostris) are not much earlier than 800 B. C., and probably were the work of Lydian Heraclid princes or of the older dynasty of the Mermnadae. None of the "Hittite" monuments, therefore, can be dated earlier than the ninth century B. C. These chronological inferences are of course wholly destructive to Sayce's theory. The "Hittite" monuments cannot have been the work of the Cheta, who flourished five hundred years earlier.

Scholars will probably accept at least these negative conclusions of the writer, who speaks with authority and conviction. His new theory, however, as to the origin of these monuments will hardly at once command assent: he suggests that these sculptures are the work of the northern people (of which the Philistines formed a branch) driven back from the Egyptian frontier by Rameses III in 1107, and his suggestion is sustained both by chronological considerations and by the stylistic features of the monuments. But, before a definitive conclusion can be reached as to this point, it will be necessary to decipher the inscriptions. Though not a little remains to be done, this much at least may now be positively asserted—the “Hittite” monuments are not the work of the “Cheta.”—F. DÜMMLER, in *Berl. philol. Woch.*, 1891, No. 25.

RABOISSON. *Description géographique des anciens empires d'Assyrie d'après les documents cunéiforms. I. Tiglath Pileser I.* 8vo, pp. 84. Paris, 1890; Écoles d'Orient.

The idea of the author—of giving the geography of the various lands conquered by the several Assyrian kings according to the inscriptions of each reign—is excellent; but this is the only point for which the book can be commended. To carry such an idea into practice requires a knowledge of Assyrian and a first-hand study of the inscriptions. Menant's “translations” can by no means be accepted as a satisfactory substitute. The author shows a vicious tendency to identify names that have a similar sound, and takes much satisfaction in his *données homotopologiques et conditions isophoniques*, fair-sounding words that do not relieve the book of its diletante character.—H. WINCKLER, in *Berl. philol. Woch.*, 1891, No. 52.

CLASSICAL ARCHÆOLOGY.

MAX BENCKER. *Der Antheil der Periegeſe an der Kunſtſchriftſtellerei der Alten.* 8vo, pp. vi, 71. Munich, 1890; F. Straub. 1.80 Mark.

This well-written and sensible book opens with an account of the literary activity of Diodoros, Polemon, Heliodoros, the only persons expressly termed *περιηγηταί* in antiquity. Thus is obtained a basis for the enquiry (in ch. II) as to the significance of the *περιήγησις* in general; in ch. III the place occupied in this class of writings by the *περιήγησις Ἑλλάδος* of Pausanias is defined. The results of the investigation are summarised as follows: “*Periegesis* is a branch of what the ancients called *γραμματική*, wherein objects of antiquarian interest were described and discussed in and according to their geographical connection. Originally it had nothing to do with the literature of art and with art-history, but it came to cross them from the fact that all dealt in part with the same subjects. . . . In attempting to form

a conception of the *periegesis* of Polemon, the most important representative of this branch of literature, the *periegesis* of Pausanias must be used with great caution. . . . Direct proofs are lacking of dependence of Pausanias upon Polemon; indeed, internal evidence tells against such a relation." The author, in spite of the general soundness of his views, has made several erroneous statements, and has treated parts of his subject inadequately. Heliodoros cannot be regarded as an "imitator" of Polemon. In the list of *periegetai* should be inserted the names of Theophilos (Sicily), Antigonos (Macedonia), and Asklepiades (τῶν ἐθνῶν τῶν ἐν τῇ Τουρδιτανίᾳ). In describing objects of antiquarian interest the *periegetai* cannot always have taken them up in succession according to their geographic or topographic location. How could such an order have been followed, for example, in Anaxandridas' περὶ τῶν συληθέντων ἐν Δελφοῖς ἀναθημάτων, which dealt with lost ex-votos?—W. GURLITT, in *Berl. philol. Woch.*, 1891, No. 1.

R. CAGNAT. *L'Année épigraphique* (1889). Paris, 1890; Leroux.

It was a happy thought that led M. Cagnat to publish first in the *Revue Archéologique*, and afterwards in an annual reprint, the Latin inscriptions that are from time to time discovered in what was the ancient Roman world. This, the second fasciculus (for 1889), is no less interesting than that of 1888; it contains 188 new inscriptions, many of which are of signal importance. On pp. 53 and 54 is given a plan of the barracks of the Vigiles lately excavated at Ostia. True to his programme, M. Cagnat furnishes, with his texts and notes, a bibliography of new books and articles on Roman Epigraphy and Institutions; this, with his excellent indexes, greatly enhances the value of a publication which is almost indispensable for students of the Latin language and of Roman history and institutions.—P. GUIRAUD, in *Rev. Critique*, 1891, No. 26.

A. CARTAULT. *Terres Cuites Grecques photographiées d'après les originaux des collections privées de France et des musées d'Athènes*. Large 4to, pp. LVII, 97; 29 plates. Paris, 1891; Colin.

After an introduction on Greek and Italic terracottas, the author describes forty-three examples, which are figured on twenty-nine inferior plates. Of these forty-three examples only three, according to the reviewer, are of unquestioned genuineness, being from Athens, Corinth and Megara respectively. Of the others, many are without question spurious and belong to the class known as "Asia Minor" terracottas (*cf. Rev. Critique*, 1890, I, p. 41), and nine have already been adequately published. The author is familiar with current literature on the subject, as is in part shown by his propounding as his own the views of other scholars, but he wholly lacks the originality that he affects. His æsthetic criticisms are vulgar and of little

value. The bibliography of terracotta figurines, covering over fifty pages, though prepared with the competent assistance of M. Froehner, is defective; in particular, we miss mention of terracottas published in Nerontsos' *Ancienne Alexandrie*, in the illustrated catalogue of the Madrid Museum, in J. de Witte's work on the collections of the Hôtel Lambert and the Musée Fol. His lists of catalogues of sales—so important to the archæologist—is incomplete (for omissions see *Rev. Archéol.*, 1888, I, p. 386), as also his account of periodicals in which terracottas have been published (he omits the *American Journal of Archæology*). The last five pages of the introduction give a summary of the problems raised by the study of the figurines. M. Cartault treats most cavalierly the views of Heuzey, Pottier, Furtwängler and everyone else except Froehner, but offers no helpful or luminous suggestions of his own. The scientific value of M. Cartault's work may be appreciated from the fact that, on the important question of the authenticity of the so-called "Asia Minor" and similar terracottas and on the controversy upon this subject, he is absolutely silent. Such silence is most reprehensible, especially in a work like this intended mainly for the non-professional reader.—S. REINACH, in *Rev. Critique*, 1891, No. 22.

[In *Rev. Critique*, 1891, No. 26, M. Cartault prints a detailed and bitter rejoinder to M. Reinach's criticisms; the rejoinder is accompanied by pungent annotations from the pen of M. Reinach.]

CH. DIEHL. *Excursions archéologiques en Grèce: Mycènes—Delos—Athènes—Olympie—Eleusis—Epidaure—Dodone—Tyrinthe—Tanagra*. 8vo, pp. 388; 8 plans. Paris, 1890; Armand Collin & Co. 4 Francs.

This book does not aim to be a contribution to science; it seeks to present to general readers an account of the discoveries of the last twenty years, together with the newest results of archæological research and inquiry in Greece. The author has written a charming and most readable book. Greek sculpture is his favorite subject, and he has in particular made a careful study of the numerous monuments of archaic art that have recently come to light. The bibliographies which head each chapter show a familiarity with the books and articles in various languages.—FR. BAUMGARTEN, in *Berl. philol. Woch.*, 1891, No. 6.

Fünfzigstes Programm zum Winckelmannsfeste der Archäologischen Gesellschaft zu Berlin. 4to, pp. 172; 5 plates and 37 cuts. Berlin, 1890; G. Reimer. 11 Marks.

This jubilee volume of the Berlin Archæological Society is worthy, alike in contents and in form, of the occasion that called it forth.—CARL ROBERT,

Homeric Cups (22 cuts). Here are fully described all the known examples of hemispherical drinking-bowls of earthenware with reliefs representing Trojan scenes, together with such as illustrate the Theban cycle and the labors of Herakles. Important conclusions may be drawn from these objects, with reference to the history of ancient poetry and legends.—FRANZ WINTER, *On a Prototype of New-Attic reliefs* (14 illustrations). The attempt is here made to prove that the relief of a mænad, of the type of the so-called Chimairophonos (from the Esquiline), is the actual original of the replicas of this type; and that this marble was one of several (four are preserved at Madrid) which formed a cylindrical basis, representing Dionysos, an altar and eight mænads: it was cut in the middle of the fifth century B. C. These propositions can hardly win assent: the Madrid marbles can not be brought into connection with that from the Esquiline. It is also extremely unlikely that Attic art as early as the middle of the fifth century B. C. should have produced compositions in relief of which the separate figures though absolutely independent of each other were modelled after statues in the round. Hauser's excellent *Die neuattischen Reliefs* is hardly improved upon in this essay.—A. FURTWÄNGLER, *An Argive Bronze*. A model discussion of a pre-Polykleitean athlete statue lately presented by Emperor William II to the Berlin Museum: especially valuable are the author's remarks on the measurement and dimensions of ancient statues.—IDEM, *Orpheus, Attic Vase from Gela* (2 illustrations). The scene on this vase—Orpheus playing to the enraptured Thracians—recalls the art of Polygnotos. The author suggests that this vase-picture, as also several other related scenes, is due to the *Bassarides* of Aischylos.—G. KÖRTE, in *Deutsche Literaturzeitung*, 1891, No. 14.

H. GUTSCHER. *Die attischen Grabschriften*. Program d. Gymnasium zu Leoben, 1890. Pp. 43.

The inscriptions are chronologically arranged, annotated, and in part translated into German verse. The flourishing period of the Attic grave-epigram begins with the fifth century B. C.: the Roman era introduced pathos and a variety of forms; then appear the signs of decline and of prosaic dullness. The same features characterize the art, decorative and constructive, of the grave-monuments.—*Berl. philol. Woch.*, 1891, No. 49.

RICHARD LEPSIUS. *Griechische Marmorstudien* (from the Appendix to the *Abhandlungen der kgl. preuss. Akademie der Wissenschaften zu Berlin*). 4to, pp. 135. Berlin, 1890; G. Reimer. 6.50 Marks.

In this book we have at last what has long been wanting—a treatise by a competent geologist on the various kinds of Greek marbles, wherein the subject is presented in a manner at once attractive and instructive.

The introduction discusses the nature of marble, and gives information as to where marble occurs in Greece: its rarity in the Peloponnesos is noteworthy. Then follows a description of the several kinds of marble which is as important for our knowledge of the geology of Attika as is Victor von Hehn's work for its flora and fauna. Not only are the physical features and properties and the chemical constitution of the various marbles clearly set forth, but also their adaptability for use in architecture and sculpture, from the æsthetic as well as from the practical point of view. In the second division of the work follows a list—with ample bibliography—of ancient sculptures, monuments, inscriptions (388 in number), from nearly all parts of Greece, which the author has personally examined with reference to the material of which they are made. These and other data here furnished cannot fail to give rise to many interesting historical and archæological inferences not drawn by the author. Thus, the fact that the roof-tiles of earlier temples (*e. g.*, the Peisistratidean temple on the Athenian acropolis) are made of Naxian marble, lends weight to the statement of Pausanias, that Byzes of Naxos, who lived under Alyattes and Astyages, was the inventor of marble roof-tiles.—CHR. B[ELGER], in *Berl. philol. Woch.*, 1891, Nos. 1, 2.

J. OVERBECK. *Griechische Kunstmythologie*. Besonderer Theil. Dritter Band. Fünftes Buch: *Apollon*. Large 8vo, pp. VII, 524; 7 plates (coins and gems; cuts). Leipzig, 1889; W. Engelmann.

In this book the author's aim is not to give a history of the art-types of Apollon—this is attempted only for the archaic period, in ch. 1—but to classify and discuss the material according to its various forms (statues, busts, reliefs, coins, vases, *etc.*). In this volume the author has had the aid of Imhoof-Blumer in gathering and publishing coin-types; these appear on five beautiful phototypes, among which plate II, with its 75 Apollon-heads, dating from the beginning of the fifth century to the Roman era, deserves especial mention. After the discussion of the individual types of the god, follow those of the myths in which he plays a prominent part. The reviewer calls attention to a few points wherein Overbeck might have spared himself some blunders if he had treated less cavalierly his [Furtwängler's] discussion of Apollon-types in Roscher's *Lexikon*. This work must, however, for many years to come form the basis of all studies of the art-mythology of Apollon, and will again and again evoke the gratitude of the student for the conscientiousness and care with which it has been prepared.—A. FURTWÄGLER, in *Berl. philol. Woch.*, 1891, No. 23.

W. R. PATON and E. L. HICKS. *The Inscriptions of Cos*. With a Map. Large 8vo, pp. LIV, 407. Oxford, 1891; Clarendon Press. \$7.50.

This attractive volume, an honor alike to authors and publishers, is, in the first place, a valuable collection of materials for the study of the his-

tory, dialect, and institutions of the important island of Kos; and, in the second place, it sheds no small amount of light upon a large number of interesting questions in Greek literature, epigraphy, and archæology in general. Mr. Paton spent a considerable part of the year 1888 in Kos, and collected a large number of inscriptions; many of these proved to be unpublished, while most of those previously published were discovered to have been in the main inaccurately edited. This book, therefore, aims to be a complete *Corpus* of Coan inscriptions, and contains all the inscriptions known to Mr. Paton. It may be regarded as registering all the accessible material: unfortunately, access was denied Mr. Paton to the Turkish fortress of the old city, where there are many inscriptions, and it is also probable that not a few inscriptions, built into Turkish houses, cisterns, and walls, have eluded search. Mr. Paton is responsible for the uncial texts, which are printed from many different fonts of inscriptional type, and for the appendices and indices; Mr. Hicks contributed the Introduction. The cursive texts and the commentaries are the joint work of the two authors.

The Introduction gives a readable sketch of the history and traditions of the island from the earliest times to the seventeenth century, with some account of the geography, ancient trades and industries, and an outline of the constitutional forms prevalent in antiquity—the latter being based almost wholly on epigraphic evidence. The distinctly conservative character of these transplanted Dorians is fully discussed, with its varied expressions in religious customs and political institutions.¹

The inscriptions belong for the most part to the period between the third century B. C. and the second or third century A. D. The oldest² is not earlier than the closing years of the fifth century B. C., and strangely enough is an Athenian inscription relating to a *temenos* of Athena (No. 148), perhaps set up by cleruchs (*cf.* Thuk., VIII. 108, and Diod., XIII. 42). The inscriptions are grouped under the following heads: Coan decrees, 13 in number, of which 3 were first discovered by Mr. Paton; foreign decrees and letters 13 [6 new]; religious ordinances and calendars 18 [7 new]; catalogues 9 [4 new]; dedications and inscriptions of statues 137 [44 new]; *termini* 7 [4 new]; sepulchral 173 [140 new]; from the Coan demes³—

¹ The chief magistrate of the Coans had, for many centuries, the unique designation of *μόναρχος*. Mr. Hicks might have emphasized (on p. XVIII) the fact that it was perhaps as Coan by birth, and the son of Dorians from Kos, that Epicharmos used *μόναρχος* for the more usual *τύραννος* (HESYCH., s. *Λυκόστρατος*).

² By an oversight both No. 148 (p. 160) and No. 420 (p. 298) are characterized as the "oldest inscription from Cos." The latter, in hexameters, and in the large finely engraved letters of the fourth century B. C., is later than No. 148. In spite of its apicated Ω, I should be disposed to date No. 53—if confidence is to be placed in Mr. Paton's facsimiles—not much later than No. 420. No. 225 belongs with them.

³ The inscriptions show that the *Phyxa* and *Haleis* of THEOK. *Id.* VII were demes, a fact that has been doubted by Rayet and others.

Phyxa 18 [15 new]; Haleis 18 [4 new]; Hippias 6 [2 new]; Halasarna 15 [7 new]; Antimachia 19 [5 new]; Isthmos⁴ 37 [9 new]. In all we have here not less than 440 inscriptions, of which more than 250 are the fruit of Mr. Paton's researches on the island, and this in spite of the fact that others had gone over the ground before him (Ross, Rayet, Du Bois, etc.). The commentary is confined for the most part to the text, but there are some exceptions where the subject-matter is lucidly discussed. A catalogue of Coan coins follows the *Corpus* of inscriptions, drawn up with the help of MM. Babelon, Imhoof-Blumer, and others: here are registered more than 255 examples, none of which are earlier than 400 B. C., while the greater part belong to the period between 300 B. C. and 50 B. C. The appendices treat, respectively, of Coan proper names from various sources not including Coan inscriptions;⁵ the calendar of Kos; dates of four important inscriptions; sepulchral inscriptions with fines; Doric tribes in Kos;⁶ Kos and Thessaly; Anios; Theokritos a Coan?;⁷ Merops. Very full indices follow, which, however, do not cover the introduction, or subjects discussed in the commentary except as these are expressly mentioned in the text of the inscriptions.

The most important Coan inscriptions are already known through pre-

⁴A seventh deme, Daphnous, is not mentioned on the stones, but only by STEPH. BYZ.

⁵It is a noteworthy fact that of these 199 names only two or three (Nikias the despot, and Xenophon the physician, of the Roman period) are found also in the vast number (over 2500) of Coans whose names are preserved on the stones.

⁶The ancient Dorian tribal division persisted without change to the last in Kos: the Hylleis, with Herakles as patron-god, had a larger share of political power—at least in earlier times—than the Dymanes (Apollon, patron-god), and the latter than the Pamphyli (Demeter, patron-goddess). Mr. Paton ingeniously suggests that the choice of earlier coin-types at Kos was based on these tribal divisions; for until the appearance of the Asklepios type—not before 200 B. C.—the coins bear the heads and other devices only of Herakles, Apollon, and Demeter.

⁷The conclusions reached in this interesting study are, in brief, as follows: The father of Theokritos, Praxagoras, was a Coan who emigrated to Syracuse about 340 B. C.; he perished there during the tyranny of Agathokles. His wife returned to Kos with her family, Theokritos being then a small boy: here she remarried, her second husband being Simichidas, a Coan citizen of Orchomenian extraction. About 288 B. C., when Agathokles died, Theokritos returned to Syracuse to reclaim his father's property. He settled in Syracuse, being of course by right of birth a Syracusan citizen, and there remained until Carthaginian inroads devastated his property, and made life impossible. He then returns to his mother, who with his step-father is now at Orchomenos (here he writes the *Charites*, or *Id.* XVI): thence he goes to Kos, where he spends the remainder of his life. He never became a permanent resident of Alexandria, which, however, he appears to have visited. The *Thalysia* (VII) shows that Kos was at that time a literary centre, and the *Encomium Ptolemaei* (XVII) and *Adonizusae* (XV) may easily have been written at Kos. Not all of Mr. Paton's conclusions are equally well sustained by the evidence adduced.

vious publications—a table of which is provided—but there is much that is noteworthy in Mr. Paton's hitherto unpublished finds. Eleven metrical inscriptions, mainly sepulchral, and in length varying from two to a dozen or sixteen lines, were discovered. Some of them are of no small literary merit. They are No's. 137 (with the name of a new poet, DELPHIS), 198, 218, 225,⁸ 335, 343,⁹ and 350, written in elegiac distichs. No. 420,¹⁰ the oldest metrical inscription, is in hexameters, and No's. 322 (epitaph of a child three years old) and 325 are in iambs. No. 324 contains an adaptation from the Anthology (*Anth. Pal.*, VII. 516).¹¹ Asklepios (Ἀσκληπίος) figures less prominently in the inscriptions than might have been expected; the tardiness of his appearance as a coin-type has already been noted. The collocation of Asklepios and Hygieia together with Epione¹² (or Epio, cf. Herondas IV. 1–6) is at least interesting.¹³ Mr. Paton would place the famous Asklepieion near Kermeti, about half a mile from the capital, on high ground, just under the red-water (κοκκινόνερρον) and other healing springs.

Mr. Hicks' Introduction is stored with sagacious and suggestive observations, and should be consulted by all students of Greek history. On p. XXII, he accepts (with K. O. Müller, Curtius, Busolt, and others, as against Holm, Lorenz and Freeman) the identification of Skythes, exiled despot of Zankle (Herod., VI. 22–24), with the tyrant of Kos (*id.*, VI. 163, 164), of the same name, who left a flourishing state to his son. On p. XXXI, he calls attention to the good repute of the constitution of Kos, which led Antigonos to direct, in his scheme for transplanting the Lebedians to Teos (B. C. 306–301), that the laws of Kos should be the law of the new city, at least for a season. Perhaps Mr. Hicks' identification of Skythes may gain greater probability, and the decree of Antigonos become more intelligible, if we look upon both in the light of an inference that may be drawn from the newly discovered Herondas. In Herondas II—the scene of which

⁸ The second line begins with Ἑορυχίς, where, however, Ἑο- has the metrical value of Εὐ-. This form, unless it be explained as due to poetic speech, might have been added to the Ionisms from Kos cited on p. XVII; the inscription was discovered since the publication of Bechtel's tract on the subject.

⁹ The last line should have been written as a pentameter.

¹⁰ Why should the second line have been made interrogative?

¹¹ It would hardly be safe to see an attempt at metrical expression (trochaic tetrapody catalectic: cf. EUR. *Phoin.* 212) in the misspelled and evidently late Christian grave-inscription No. 68: ΕΙCΘΕΩΘΕΕΝΟΥΡΑΝΩ : Εἰς θεῶ(ς) ἐν οὐρανῶ(ι). Unless the inscription is a modern forgery, it is interesting, especially when one considers its presence among altars and dedications to many gods.

¹² The less approved spelling Ἡπίονα (Hepiona) appears on pp. 53, 54 (No. 30), but elsewhere the unaspirated form.

¹³ Cf. No's. 345, and 30, both of which are not much earlier than the Christian era.

is laid in Kos—at vv. 45–48 a law of Χαϊρώνδης is cited touching cases of assault and battery. The presence of this name at Kos has been variously accounted for, but the following explanation is at least possible. It is known that the laws of the ancient Italian law-giver Charondas were in vogue in Zankle before Skythes was driven forth by Anaxilas who abrogated them. Skythes now, on establishing himself at Kos, would have been very likely to adopt for his new state the laws that had commended themselves to him when despot of Zankle. Adopted by the order-loving Coans, the ancient code, if the expression be allowed, may have gained new popularity, and the successful experiment of transplanting it from Sicily to Kos by Skythes may have suggested to Antigonos a similar transplanting for the Lebedians in their new homes in Teos.

This careful and scholarly book, which ought to be the precursor of similar studies of other Greek islands or cantons, may be commended especially to the student of practical, or field, epigraphy. No better preparation of its kind can well be imagined for an epigraphic tour in Greek lands to-day than a careful study of the inscriptions in this book, from all possible points of view, whether linguistic, literary, epigraphic, historical or institutional.—J. H. WRIGHT.

EMIL REISCH. *Griechische Weihgeschenke* (in *Abhandlungen des archäol.-epigraphisch. Seminars d. Universität Wien*, herausgeg. von O. Benndorf und R. Bormann. VIII). 8vo; 14 cuts. Vienna, 1890; Tempusky. 7.80 Marks.

In the introductory section, the author discusses the origin of votive-offerings among the Greeks, and sketches their history down to their culmination in the fifth century, where there was a perfect harmony between religious sentiment and artistic expression, and thence traces their further use in great variety with less significance until the time when the ex-voto became little more than a self-glorification of the dedicator under the guise of religion. The significance of the offerings and the motives that guide their choice are skilfully treated. A detailed discussion is attempted only in the case of agonistic offerings (prize tripods of the Attic tribal choruses, ex-votos of the dramatic choregoi, etc.). This highly important work may be cordially commended to all specialists, and it is to be hoped that the author may continue his researches in a field from which so much has already been won.—E. FABRICIUS, in *Berl. philol. Woch.*, 1891, No. 34.

B. SCHMIDT. *Korkyräische Studien*. 8vo, pp. 102; 2 maps. Leipzig, 1891; Teubner.

This book is based upon personal observations made by the author during a long sojourn in the island in 1878. It proves conclusively the incor-

rectness of Müller-Strübing's view, according to which Thukydides' account of Corcyrean history in 424 B. C. is a tissue of impossibilities and contradictions, and makes it highly probable that Thukydides had visited the island, perhaps when *en route* for Sicily. Many of Schmidt's remarks are interesting: for example, he points out a strong resemblance between the general plan of Korkyra and of Syracuse (*cf.* the tradition respecting the architect Archias, Strabo, VI. 269). The hexastyle Doric temple discovered in 1822 is probably an Asklepieion. Schmidt identifies Thukydides' Istone, not with an isolated mountain, but with the chain of mountains traversing the island from southeast to northwest. The accompanying maps of the island and of the ancient city and vicinity are admirably done.—S. REINACH, in *Rev. Critique*, 1891, No. 19.

CARL SITTL. *Die Gebärden der Griechen und Römer*. Large 8vo, pp. v, 386; 4 plates and 50 cuts. Leipzig, 1890; Teubner.

The subject of the gestures of the Greeks and Romans—*i. e.*, the non-mechanical movements of the body and the resultant significant attitudes—is one that has not been satisfactorily explored. This book, the fruit of ten years' study, is modestly offered, not as a scientific treatise but as a collection of miscellaneous items of information on the subject. The classification adopted by the author is arbitrary—the several chapters being: (I) idea and occasion of gesture; then, gestures expressive (II) of emotions of the soul, (III) of approbation; (IV) lament for the dead; (V) conventional salutations; (VI) symbolical gestures; (VII) gestures for the purpose of averting evil influences (*deisdaimonia*); (VIII) symbolical of law; (IX) acts of homage; (X) in prayer; (XI) gestures of actors and orators; (XII) the language of signs; (XIII) dancing and pantomime; (XIV) computation on the fingers; (XV) gestures in art; (XVI) intervention of divinities. The author's materials are badly arranged; he has omitted to discuss many attitudes which were deemed significant, *e. g.*, the crossed legs, hands held behind the back, both of which suggest meditation. On the other hand, he has included many movements which, properly speaking, do not belong to his subject. He knows the ancient authors much more intimately than the monuments. In the latter class of his authorities, while making a haphazard use of vase-paintings, he appears to have wholly overlooked a most important source of information, the Greek terracottas and engraved gems. However, in spite of these deficiencies, the book bears witness to profound research and wide reading, and abounds in interesting and suggestive remarks. Many of the author's parallels for ancient usage drawn from modern popular customs and from folk-lore are instructive, but not a few are quite far-fetched.—S. REINACH, in *Rev. Critique*, 1891, No. 12.

H. L. URLICHS. I. *Herakles und die Hydra*, ein Torso des von Wagnerschen Kunstinstituts der Universität Würzburg. II. *Ueber einige Werke des Künstler's Pythagoras* (extract from *Verhandlungen der 40. Versammlung deutscher Philologen in Görlitz*). 4to, pp. 26 ; plate. Leipzig, 1890 ; Teubner.

I. The torso that forms the subject of the first part of this study was obtained in Rome in 1888. It represents Herakles carrying the corpse of the Hydra. It is a work of Roman art, bears evidence of polychromy, and appears to be a reduced copy of a colossal original. The Hydra is here represented with head of a young woman and a serpent's tail. Urlichs furnishes a long list of monuments that give this type of the Hydra, all of which belong to Roman times. Hesiod (*Theog.*, 297 ff.) shows that this is the type not of the Hydra but of Echidna, mother of the Hydra. We may assume, therefore, that in late Hellenistic art the two types were confused, that of the mother being adopted for the daughter. This marble is the only one thus far known where Herakles appears as the conqueror carrying the corpse of the Hydra (*cf.*, however, Seneca, *Herc. Fur.*, 46, *armatus venit leone et hydra*). II. In the second part, Urlichs discusses Plin. *HN*, xxxiv. 59 as to the works of Pythagoras of Rhegion. The statue *puer tenens tabulam* is Pausanias' athlete Protolaos (at Olympia) ; and the *mala ferens nudus* is not, as is commonly supposed, a Herakles of the Farnese type but Pausanias' athlete Dromeus carrying the apples which were given as prizes to victors in the contests at Delphi.—S. REINACH, in *Rev. Critique*, 1891, No. 18.

CHRISTIAN ARCHÆOLOGY.

RAFFAELE CATTANEO. *L'Architettura in Italia dal secolo VI al mille circa*. Ricerche storico-critiche.

The obscurest period in the history of Christian architecture in the West, extending from the invasion of the barbarians to the Romanesque revival in the eleventh century, attracted the author from an early age, in so far as his own country, Italy, was concerned. The present work is the result of the study of many years. It deals with the much vexed question of Early Lombard Architecture, which has puzzled and is still puzzling all critics. Did a new style arise in Lombardy in the eighth and ninth centuries? Did it invent the ribbed cross-vault and the grouped pier? Are S. Ambrogio at Milan and S. Michele at Pavia the prototypes of the Romanesque style? The question of the origin of mediæval architecture lies in the answer to these questions. Professor Cattaneo has given us his answers, and with great fullness. His method is thoroughly scientific. He throws overboard all preconceptions, and devotes himself to a careful study of the

scanty remains that are known to belong to the period between the sixth and tenth centuries. These works he studies in chronological order, classifying them under three heads: (1) Latino-Barbaric architecture during the Lombard dominion; (2) Byzantino-Barbaric style, or second influence of Byzantine on Italian art; (3) Italo-Byzantine style from the close of the eighth cent. to 1000 A. D. Then follow two more special chapters on architecture in the Venetian lagunes, first from 800 to 976, and then from 976 to 1050. In so far as architecture pure and simple is concerned, the author's investigations prove conclusively, in his opinion, that throughout this period the basilical style alone dominated, with its simple ground-plan, its columns supporting round arches, and its wooden roof. The author's independence of judgment is shown in his questioning many hitherto accepted facts. For example, the great transverse arches in Santa Prassede in Rome, supported on piers between which are three columns, have been always quoted as belonging to Pope Paschal's time in the ninth century, and as a first step toward vaulting, afterwards imitated in San Miniato at Florence. But Professor Cattaneo attributes the piers and arches to a restoration of the twelfth or thirteenth century. He attributes the use of galleries at S. Agnese and S. Lorenzo in Rome to the low level of the pavement of these churches, the galleries having been added, for the use of the congregation, when their humidity had become evident. His study of the introduction, in the eighth century, of the two side-apses, at the head of the side-aisles, is interesting and convincing. He gives a more careful study than has been hitherto given to such important churches as those of Grado, Torcello, Valpollicella, Brescia (S. Salvatore), Alliate, Vicenza (SS. Felice e Fortunato), Caorle, Aquileja, *etc.* The chronology of most of the monuments described, the rejection, from the series, of many others regarded by other critics as belonging to this period, is based very largely upon the contemporary style of decorative sculpture. Sculpture has been taken as a guide for dating later mediæval monuments, but for this proto-mediæval period the difficulty of a satisfactory and clear classification and chronological attribution of a mass of material whose variations were but very slight and to which so few dates were attached, had always acted as a deterring impediment. I am inclined to believe that Professor Cattaneo has largely overcome these difficulties, and has established classifications that will stay. He finds, as is usually granted, a strong Byzantine influence coming into Italy during the first half of the sixth century and expiring after a short while, leaving Italian art in utter barbarism. Then, early in the eighth century, came a second influx of Byzantinism; this time not so pure and artistic, but sufficient to produce, during a half-century, works of a marked character, works none of which were, in his opinion, executed by native Italians, but all by Byzantine Greeks. Then comes a period of

comparative revival of native art, during which the Byzantine decoration previously prevalent at Rome appears in the Neapolitan province, in the Marches, Umbria, Tuscany, Ravenna, Lombardy, Venetia, and even in Istria and Dalmatia: its centre came to be in Lombardy, where it was gradually transformed into Romanesque. The author virtually gives up the claim of Lombardy to the invention of the grouped pier and ribbed cross-vault, by denying that the vaults of S. Michele and S. Ambrogio are earlier than the close of the eleventh century. The long discussion on S. Ambrogio and especially of Dartein's arguments is very interesting, and the use of the wooden roof in the only buildings known to be erected by Anspertus, the builder of S. Ambrogio, seems to clinch the argument. The last chapters, on art in Venice in the tenth and eleventh centuries, are especially interesting, closing as they do with a most artistic and original development of Italo-Byzantine or, as he terms it, of Neo-Byzantine art. Venice and her territory were then filled with churches and palaces of a pure, artistic, and unusually rich art, whose decorative effects are hardly surpassed during the later Middle Ages.

Perhaps the most important result of this book is a negative one. It cuts the ground from under the feet of many hypotheses, and in this way makes possible a clear and logical history of art in Italy during the period that follows the year 1000.—A. L. FROTHINGHAM, JR.

G. DEHIO and G. VON BEZOLD. *Die kirchliche Baukunst des Abendlandes*, historisch und systematisch dargestellt. 3 fasc. in 8vo, and 4 atlas in fol. Stuttgart, 1884-91; Cotta.

It is not necessary to await the completion of this vast work, before calling attention to its importance and to the services it may be expected to render to our knowledge of the architecture of the Middle Ages. One feature that lifts it in significance far above all similar works and will lend it permanent value, is its exceptional and abundant wealth of carefully chosen and helpful illustrations. 282 folio plates have already been issued with an aggregate of 1200 to 1500 illustrations, all drawn to one scale. They are so grouped as to give comparative tables of ground-plans, sections, elevations, on a scale never before attempted. The text on the whole is hardly commensurate with the illustrations, not only because of the limited amount of space given to it but because the historical aspects of the development of architecture have been subordinated in the general scheme to classifications according to the chief architectonic features. Thus, after a brief historical introduction, the authors give a long chapter to the technical and æsthetic analysis of what they term the *Zentralbau*, i. e., that of edifices composed of a central portion dominating adjunct structures of a lesser height. Under this head, which comprises buildings of various plans and

uses, they pass successively in review rotundas of all kinds, from the frigidaria of the baths at Pompeii to the church of San Giovanni in Fonte at Ravenna; then churches with central cupola, of the Byzantine type (SS. Sergius and Bacchus, S. Sophia, at Constantinople); then the monuments which are imitations of the Holy Sepulchre (from S. Stefano Rotondo in Rome to the Baptistery of Pisa). After the rotundas, are treated churches in the form of a Greek cross—as that of the Apostles in Constantinople, the cathedral at Trèves, the Carolingian church of Germigny-des-Près. Convenient as this classification may be for the study of the development of individual architectonic types, it is confusing when we have in view the history of architecture as a whole, bringing side by side, as it does, monuments of widely separate periods, and making it difficult to cull out the characteristics of the different historic styles. The subject of the third chapter is the Basilica—its origin, general scheme, interior elevation, exterior features, construction, and decoration. The second book opens abruptly with Romanesque architecture, the distinct beginnings of which the authors place not as late as the eleventh century, with Kugler, Mertens and others, but in the ninth century, thereby including under this rubric the architecture of the Carolingian era. The chief innovation of Carolingian architecture—the substitution of the cruciform plan, with choir and transepts, for the basilica—is properly ascribed to Frankish artists, but the authors are hardly right in seeking the cradle of this innovation in a region so limited as the Rhine provinces and Hesse. France, in the modern geographical sense, had a distinct share in the early stages of Carolingian art; and it is historically certain that the great monasteries established on the Seine and the Somme exercised a commanding influence, both religious and artistic, upon the whole of the western part of the empire of the Franks as early as the ninth century. The authors concede that it is difficult to determine the part taken by France in the Carolingian period, since no monuments of the art of this period older than 1000 A. D. exist in France. But we urge that the same negative criticism which denies French influences in Carolingian art, if applied to the Germanic monuments claimed for this period, would produce disastrous results: the dates of the founding of the churches of Fulda, Hersfeld, *etc.*, accepted by the authors are no better established than those of churches in France proper, which are brought down to after 1000 A. D., without any consideration being made of elements in French structures of the eleventh century that point to a much earlier origin. However, on the authors' account of Romanesque art (from the eleventh century onward) we would pass no severe criticism: it shows breadth of knowledge and soundness of judgment, and French monuments are adequately represented. The fasciculi that are next to appear will treat of Gothic art, and are impatiently awaited. If the promise of the

earlier fasciculi be fulfilled in the subsequent numbers, it is safe to say that this work will at once take rank as the most complete and useful of repositories of information on the ecclesiastical architecture of the Middle Ages.—R. DE LASTEYRIE, in *Rev. Critique*, 1891, No. 22.

LOUIS GONSE. *L'Art Gothique. L'Architecture—la Peinture—la Sculpture—le Decor.* 4to, pp. 476. Paris, anc. mais. Quantin [1891].

This work on the Gothic art of France is from the hand of an enthusiastic lover, to whose enthusiasm are added both insight and patience—insight into causes and ideas and processes of development, patience in the discovery and study of monuments that complete the chain of circumstantial evidence. M. Gonse does not claim to be a specialist—although he could not be denied such a claim: his aim is to present, for the first time, a complete picture of the development of art in France from the beginning of the twelfth to the close of the fifteenth century. His book is addressed to a wide public, and its charm is such as to insure its success in this direction: at the same time it appeals in many parts to specialists in the study of the Middle Ages and brings before them many new things.

The lion's share is given to architecture, for, as the author remarks, "with all nations who have created an original art, the natural and logical expression of religious or material needs, . . . architecture is the initial, predominant force, giving birth to all derived arts." After two introductory chapters, on the rehabilitation of the Middle Ages in modern times, and on the transformation of the basilica before and during the Romanesque period, he takes up the fundamental problem of the origin and history of the Gothic vault—the pointed ribbed cross-vault. This problem is one that has more than any other excited the interest of specialists during the last ten or fifteen years, and Quicherat, Viollet-le-Duc, Anthyme Saint Paul, De Lasteyrie, Lefèvre-Pontalis, Moore, have in turn contributed their quota to the discussion. In my opinion, M. Gonze has contributed more material—both monumental and critical—than all these critics together. His patient investigation, inch by inch, of that part of the Ile-de-France which was the birthplace of the Gothic style has borne fruit in a numerous series of monuments hitherto unknown, which appear to supply every missing link in the chain between the two works that hitherto had formed the basis of study—Morienvall (1090) and St. Denis (1140). In the future, the churches of S. Stephen at Beauvais (1110), Bury (c. 1120), Noel-Saint-Martin (c. 1120), Berzy-le-Sec (1130), Bellefontaine (1125), and others, will take their due place in this series. All these buildings are outwardly Romanesque. The next period, from about 1125 or 1130 to 1150, Gonse calls *transitional*. As the preceding years had been devoted to the working-out of the elements of the cross-vault, so

the architects of the transition invented the complements to the vault, necessary to its proper use—the wall-rib and the flying buttress. The monuments where this style is shown are S. Louis at Poissy, the choir of S. Martin-des-Champs, Courmelles, S. Pierre de Montmartre, S. Maclou of Pontoise, Saint Germer, and others, leading up to and culminating in Saint-Denis, the first truly Gothic building. Then come chapters on Primary Gothic (1150–1180), on the Great Cathedrals, under Philip Augustus (1180–1223); on the propagation of Gothic under S. Louis IX (1226–1270). The rest of the Gothic period is treated with less detail, but its principles and tendencies fully brought out, down to the close of the flamboyant style. There are separate chapters on Civil and on Military Architecture, and on the propagation of Gothic art outside of France. The second part of the book, devoted to decoration, treats, first, of wall-painting, panel-painting, glass-painting, tombstones, tapestry, and illuminations; then of sculpture, and finally of costume and furniture. These chapters, though not so full as those on architecture, are still sufficiently detailed to give a good picture of the development of the various branches of art. The illustrations are numerous and fine: twenty-eight full-sized plates and over three hundred insets. Were this a book for the specialist, we should be warranted in censuring M. Gonse for a lack of sections and other architectural drawings to accompany his descriptions: this is especially required in the chapters on the earliest phases of Gothic, where we are obliged to depend largely on M. Gonse's judgment, without being given means to verify his assertions. I think it would have been preferable to omit altogether the chapter on the spread of Gothic outside of France: it is meagre and apparently done at second hand. Except for these two slight blemishes, this book is well-nigh perfect. The arrangement is clear and logical, the style vivid and interesting, the acquaintance with the subject broad, the appreciation of all its sides comprehensive. No lover or student of Gothic can be without it. Especially to be applauded is the view that is taken of the spirit of Gothic art. It is as far removed from dry-as-dust antiquarianism as from gushing neo-Catholic ecclesiasticism; it does not uphold art for art's sake, but recognizes the great importance of the ideas back of the artistic form; it does not dissect them as it would prehistoric specimens, but treats them as if they were endued with life and full of significance.—A. L. FROTHINGHAM, JR.

CORRESPONDENCE.

LETTER ON THE BABYLONIAN EXPEDITION.¹

This is not a report of the work of the expedition, but a brief statement of a very few of the more tangible and rapidly available results.

I. **GEOGRAPHICAL RESULTS.**—The site of Thapsacus or Tiphseh was located at a ruin-site called *Dibse*, about eight miles below the modern Meskene, instead of at El-Hammam, a day and a half further down the river. The identity of name was the main factor in this determination of site. The same conclusion was reached independently by Dr. B. Moritz and the German expedition, but not published by them until after our announcement.

Kiepert's map represents *Deir* as the point on the Euphrates reached by a natural road from Palmyra along a sort of *wadi*, or valley. There is no such formation, no wadi or valley whatsoever. The ancient road can be plainly followed from Palmyra to Sukhne, after which its course is not so clear. One road seems to turn northward and reach the Euphrates at Halebiyeh or Zenobia (for the old name is still current), where the Euphrates breaks through a trachite dyke; another road, that leading to Babylon, appears to have struck the Euphrates two days' journey below Deir at Salahiyeh. Here, as at Zenobia, are the well-preserved remains of a Palmyrene city. In Arabic times a third road, still used by the Arabs, reached the Euphrates at Meyadin, a day's journey below Deir, where the ruined castle of Rehaba stands. This would seem to be the natural route to the valley of the Khabor and to Mosoul.

Our investigations at *Anbar* led me to reject entirely Dr. Ward's proposed identification with Sippara.

Zibliyeh, a few hours north of Niffer, reported by late travelers as the ruins of a ziggurat, we proved to be a ruined tower, perhaps of the Parthian period.

Hammam, also reported to be a ziggurat, and supposed by Hommel to be on the site of Nisin, sister city to Nippuru, we found to be a tower. Both of these may have served to guard canal centres, and Akerkuf may have been a fortress erected for a similar purpose.

¹ This communication has been received from Dr. Peters, the leader of the expedition sent to Babylonia by the University of Pennsylvania.

Tel Ede, reported to be a ziggurat, proved to be a natural sand-hill, with a few graves, etc., at its base.

A canal, reported to be *Shatt-en-Nil*, we traced at points from Babylon, where it leaves the Euphrates, through Niffer to Bismiya, Yokha and Warka, at which point it rejoins the Euphrates.

The name *Abu Shahrein* for ancient *Eridu* seems to have been lost. We heard instead the name *Nowawis*. It is just visible from Mugheir on the edge of the desert. Delitzsch and others have recently located it, without any ground, east of the Euphrates and south of Shatt-el-Hai! It is west of the Euphrates and north of the most northerly mouth of the Shatt-el-Hai.

Kufa we found to have vanished, being represented only by a few piles of brick and earth, and holes where the men of Nejed have excavated for bricks for building. The ancient *Assyrium Stagnum* near by, south of the city of Nejed, has been drained dry, effecting a considerable change in the geography of the region.

At *Gaza* in Palestine I found that a supposed hill of considerable extent in the midst of the town was a mass of *débris*. An ancient wall of sun-dried brick had become exposed on one side at a depth of fifteen to twenty feet below the surface. This would seem to show that modern Ghazza stands on the ruins of an ancient city, presumably Gaza, contrary to the ordinary view.

II. EXCAVATIONS.—Our principal work at *Niffer*, ancient *Nippuru*, was the excavation of the great *temple of Bel*. The temple proper was enclosed by a huge wall two hundred metres square. This still stood to a height of nineteen metres, with a thickness of fifteen metres at the bottom, and nine at the top. It was of sun-dried brick, with the exception of a facing of baked brick in its lower courses. I have called it square, but a mistake of several degrees at the eastern corner, substituting an obtuse for a right angle, gave it an irregular shape. Within this outer wall on the southeast side, or front, at a short distance there was a second wall, and beyond this another, so that one mounted by degrees to the lowest stage of the ziggurat proper. Of the ziggurat three stages may be said to have been preserved, with traces of a brick structure on top. It was a solid mass of sun-dried brick faced with burnt brick. On each side was a huge buttress, and no two of the buttresses were alike. The corners were twelve degrees off from the cardinal points. Here and elsewhere I found that the orientation was not measured, but approximate. I think the practice of pointing a corner rather than a side to the north has, at least in its origin, no special religious significance, but is due to the general trend of the land, which is oblique, from northwest to southeast. Rivers and air currents both follow this trend. The ziggurat proper now stands to the height of 24 metres.

I removed all the corners of this structure in a vain search for barrel cylinders. There were no inscriptions in or on the ziggurat. At various places in the temple, however, we found tablets, vases, inscribed bricks, door-sockets and the like. The oldest inscriptions found were those of Sargon king of Agade, father of Naram Sin. Both of these kings claim to have built or rebuilt this temple, which had hitherto been supposed to be a construction of Ur-gur, king of Ur. Inscriptions of at least one new king of this most ancient Akkadian dynasty were discovered. Fragments of statuary were found, and a pair of clasped hands had evidently belonged to a statue strikingly similar to those found by De Sarzec at Tello.

Outside of the southeast wall was a shrine of Amar-Sin. Outside of this, and facing a branch of the Shatt-en-Nil canal, was a row of booths containing pilgrim's supplies. The entire stock in trade of one maker and vender of votive tablets was recovered. These belong to the Kassite dynasty, the latest date being that of a hitherto unknown son of Kurigalzu. Perhaps the most singular part of this find was the inscribed glass adzes. These were of remarkably fine composition, made to resemble lapis lazuli, an opaque blue, colored with cobalt, and bearing the name of Kurigalzu, *circa* 1600 B. C. Other glass objects were made to resemble turquoise. This is one of the earliest discoveries of glass ever made, and is only surpassed by a couple of finds made in Egypt.

The great bulk of inscribed clay tablets, even those dealing with the temple income, were discovered in the other mounds, and even across the canal from the temple. Tablets, principally unbaked, were found in great numbers. They belong chiefly to the Hammurabi and Kassite dynasties, though Assyrian and late Babylonian and Persian tablets were not wanting. Among others, tablets were found bearing the seal of Amar-Sin, king of Ur, by his *patesi* or governor. A couple of tablets are dated in the reign of Ashur-etil-ilani, son of Ashur-bani-pal, king of Assyria, and are chronologically of considerable importance.

The latest inscribed objects of any sort found were Hebrew incantation bowls, which were dug up in considerable numbers. In one place the mounds, as late as 700 A. D., had been occupied by a Jewish town.

The mounds of Niffer are of enormous extent, and while the work of excavation was conducted on a large scale the amount excavated is still small in proportion to the amount untouched. Our greatest depth, through and under the ziggurat, was twenty-five metres. The door-sockets of Sargon were found at a depth of fifteen metres below the surface of the temple plateau. A *cache* of Kassite tablets was found at a depth of thirteen metres below the summit of another hill. On the other hand, a couple of rooms full of tablets were in another place close to the surface. But this

was in a *wadi* made by the water, and was more than thirteen metres below the true surface. In general the old remains are at a considerable depth.

There are no architectural remains of any importance, though we unearthed one building, doubtless regarded as a triumph in its time, with brick colonnades. But in general there was no fuel to burn brick, and the inhabitants, forced to use sun-dried bricks, took refuge in mass and color. We found the remains of pink and yellow painted frescoes on the mud-brick walls, and the mass of the buildings is truly imposing.

JOHN P. PETERS.

ARCHÆOLOGICAL NEWS.

SUMMARY OF RECENT DISCOVERIES AND INVESTIGATIONS.

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AFRICA.

EGYPT.

ARCHÆOLOGY IN EGYPT.—Professor Sayce writes to the *Academy* of Dec. 5 to offer his solution of the present unsatisfactory state of affairs in Egypt in archæological matters. As but little improvement has been effected hitherto, notwithstanding the vigorous crusade carried on during the past years, of which echoes have been heard in this Journal, we hope that Prof. Sayce's sensible suggestions will be carefully considered. In the same *Academy* it is announced that the Government of Egypt has asked the *Caisse de la Dette* for £50,000 from the general reserve-fund on behalf of the Department of Antiquities. Professor Sayce writes: "The conditions under which the Museum of Bulaq was started have ceased to exist. In place of the unpretending collection of antiquities which Mariette brought together, Egypt now possesses a large and important museum, the management and development of which for the use of science is sufficient to tax the strength of a large staff of officials. At the same time, the government has awakened—to some extent, at least—to the necessity of preserving those monuments of the past which are at once the property of the state and the means of attracting an ever-increasing number of rich visitors to Egypt. The country, moreover, is patrolled by an efficient force of police under foreign officers, and the Board of Public Works is filled with men who are educated and incorruptible. If, then, the Museum of Gizeh is to take the place which properly belongs to it by the side of the other great museums of the civilized world, if it is to perform efficiently the duties which

archæological science demands from it, it must be reconstituted on the same basis as the museums of Europe and America. Functions which do not belong to a museum must be handed over to others to whom they more properly appertain, and the director and his staff must thus be left free to do the work which alone can make the Museum of Gizeh of use to the scientific world. At present, not only does it not possess a catalogue; there are no labels even attached to the objects exposed to view which are intelligible to the majority of visitors. Many objects are still lying in unopened cases, or unarranged. But the staff are not to blame. When the director and one of his assistants are away during part of the year, superintending excavations in Upper Egypt or the engineer's duty of erecting iron gates, how is it possible for the proper work of a museum to be carried on? The mutilation of some of the most precious monuments of Upper Egypt some years ago showed how disastrous is the combination of incompatible functions to the safe keeping of the monuments themselves. The backward state of the Gizeh Museum is only a temporary loss to science; but the destruction of the tombs of el-Bersheh is irreparable. What, therefore, I would urge in the interests of science, is that the preservation of the Egyptian monuments be transferred from the administration of the Museum, who are powerless to punish offenders, to the police, the natural guardians of the property of the state. Let the police be made responsible for the safety of the great monuments of ancient Egypt, and there will no longer be any fear of their further destruction. Secondly, let it be understood that the proper work of the Museum is to look after its own treasures, and make them available for scientific study, not to excavate. What would become of the British Museum, in spite of its large staff of officers, if it were to occupy its attention with controlling, much more directing, all the excavations which are made in Britain? And yet this is the impossible task which the Gizeh Museum, with its insufficient staff, is now called upon to perform."

PRESERVATION OF MONUMENTS.—The Society for the Preservation of the Monuments of Ancient Egypt has issued a report of its second annual meeting. It deprecated in the strongest manner the project, to which we have already referred, for drowning the island of Philæ, which has been officially admitted to be really imminent, by making a dam to raise the water more than twenty-three metres higher than the level of a low Nile, and thus, at a cost of not more than 750,000*l.*, provide an enormous supply of water for irrigation. There is the alternative of making two lakes by means of dams, one at Wady Halfa, the other at Kalabshah, the cost of which would be about a million. Two new posts of Inspectors of Ancient Monuments in Egypt have been created, but it is not known that the tenants have been appointed, much less taken up their duties. At the meeting,

Lieut.-Col. Plunkett called attention to the destruction of monuments now going on in hundreds of places on the Nile. The "guardian" who had been sent up to take charge of Philæ lived in a chamber of the temple, and lit his fire in the middle of it, which cracked the stones and brought down the roof. The leader of a party of tourists lit Bengal lights in the tombs of the kings, which did irreparable damage. Prof. Bryce said there went, four years ago, to Luxor a wealthy Russian boy of seventeen, with guides using lighted candles, "whose amusement was to deface with smoke the cartouches and the figures of the kings."—*Athenæum*, Oct. 10.

EGYPT EXPLORATION FUND.—M. Naville left Marseilles on Dec. 12 for Alexandria, in order to resume work for the Egypt Exploration Fund. He expects to return this year to the Delta, the scene of his former labors.

MODEL OF AN EGYPTIAN TOMB.—M. Maspéro submitted to the French Academy (Nov. 20) an exact model of the tomb of Anna, who held high offices under kings Thothmes I, Thothmes II, Queen Hatasu, and her nephew King Thothmes III, during the VIII dynasty. The model was made by M. Boussac, and it reproduces not only the structure but all the wall-paintings with fishing, hunting and agricultural scenes; the garden and lakes of the deceased; processions of gift-bearers; *etc.* The publication of all the Theban tombs, of which this is one, has been undertaken by the Members of the French School at Cairo.—*Ami des Mon.*, 1891, pp. 374-5.

ABOUKIR.—Excavations are being conducted at Aboukir by Danninos Pasha, on behalf of the Ghizeh Museum, on the site of a small temple of the Græco-Roman period which stood at a short distance to the east of the temple ordinarily identified with that of Arsinoë Aphrodite. Accounts have already appeared in the English papers of the granite statues of Rameses II and his consort which have been found there, but it has not been mentioned that on one of the statues the name of Menepthah is associated with that of his father Rameses, or that on another Hentmara is called, not only the "royal chief wife" of the Pharaoh, but also "the royal daughter of his body," her name being enclosed in a cartouche. Since the discovery of the statues a torso of Rameses II has also been disinterred, as well as two sphinxes of sandstone, one of which is inscribed with the name and titles of the same king. The second sphinx is larger and of finer workmanship than the first, and has a cartouche on the breast. This has been erased, and a name, hitherto unidentified, has been substituted for it. A careful examination of the effaced cartouche on the breast of one of the sphinxes shows that it originally belonged to Amenemhat IV of the twelfth dynasty; and it is probable that the other sphinx, which was afterwards usurped by Rameses II, also belonged originally to the same period. Both the sphinxes are headless, but the head of one of them has been discovered at no great distance from the body. It is evident that all the monuments

found on the site of the temple have been brought from elsewhere, and the weathered condition of some of them makes it probable that these were transported from ruined sanctuaries of the Pharaonic period. From the construction of the temple it may be inferred that it was built after the beginning of the Christian era. It is pointed out by Danninos Pasha that the standing statue, which now bears the name of Rameses II, must likewise have been a work of the twelfth dynasty. The statue was originally about three metres in height, and among the inscriptions engraved on it is one in which Rameses is compared with the god Set. It is therefore probable that the statue originally stood at Tanis, and the other monuments may have been brought from the same place.—*Athenæum*, Nov. 14, 28.

AHNAS = HANES = HERAKLEOUPOLIS.—**EXPLORATIONS OF M. NAVILLE.**—The results of the excavations of M. Naville on this site are summarized from *Biblia* of August, 1891. The city was twelve miles w. of the Beni Suef, near the Bahr Yussuf, and the necropolis is on the opposite side of the canal on the ridge of hills which separate the valley of the Nile from the southern part of the Fayûm.

NECROPOLIS.—The necropolis extends from the limits of the valley towards the hills, on a slightly undulating ground. The tombs are most numerous on two rocky heights which rise above the others at the entrance of a wide concavity by which the ridge is interrupted and which is the way to the Fayûm. In that part the tombs are rectangular pits, at the bottom of which there are two, and sometimes three, side chambers. Many of them had been filled with sand and we cleared them with the hope of finding the original interments, but everywhere we found that the tombs had been re-used in later times, plundered of their valuables, even of their coffins, and employed for bodies evidently belonging to the poorer class. They had no coffins, were generally not embalmed, and lying over or under a mat of reeds. With the bones were sometimes found small baskets containing food for the deceased, chiefly nuts of the doom palm and bread, sometimes also poppies, and pigeons' eggs. Here and there were a few remains of the former occupants, for instance, a piece of a handsome funerary cloth on which the weighing of the soul had been painted, fragments of papyri, and pieces of limestone hieroglyphic tablets, evidently belonging to the XVIII and XIX dynasties. I should not wonder if even those were not the original occupants, and if those pits went up as far as the XI or XII dynasty.

On one of the hills, quite at the top, and at a very small depth among rubbish of broken bricks and chips of stones, we found about twenty coffins, most of them of women. They all bear the characters of a very late epoch, some of them are even of the worst Roman style. They are without names and without ornaments or amulets, except necklaces of very small glass beads or small shells.

In the lower part of the necropolis the coffins are plain rectangular boxes without any ornament or painting; one or two red vases of common pottery were put in the pit, which was not deep and of the size of the coffins. Twice we discovered mummy cases belonging to an older epoch which had been re-used, one of them of the XX dynasty, the other possibly as old as the XI; the mummies which they contained were quite out of proportion with the coffins. The most plentiful crop we had in the tombs were hundreds of wooden or terracotta statuettes, *ushabtis* of the coarsest description, some of which were mere little sticks on which eyes and a nose had been indicated with ink, and where the name was written in hieratic. These statuettes belong to various epochs, and, although some of them are undoubtedly very late, I believe some of them are remains of the XX and even of the XIX dynasty. In a few large pits there were at the top painted coffins and underneath heaps of bones and of mummified bodies, the whole had been thrown in without any order.

CITY.—Finding that the necropolis gave so little result, and that there was nothing belonging to older epochs, we left the desert, and went over to the mounds of Henassieh. The site of the old city is indicated by several mounds of such an extent that they are called in the place itself *Ummel Kimam*, the mother of mounds. Several villages are built over them, the largest being *Henassieh el Medinet*, in the name of which we may recognize a corruption of the old *Hanes*. All over the mounds scattered blocks of red granite show that there must have been a construction of importance, but nothing in the nature of the soil and in the appearance of the locality shows distinctly as at Bubastis where the temple must have been. Therefore it was necessary to trench and dig pits in all the different parts of the Tell. We began near to parallel rows of standing granite columns without capitals, of Roman or Byzantine aspect and called *el Keniseh*, the church. There was nothing in the space between the two colonnades which is more than 50 yards wide; but on the west there was another hall with limestone columns bearing well sculptured Corinthian capitals. The whole seems to me to have been a Roman temple.

In two other places were several shafts of red granite columns lying on the ground. Researches made all around and even underneath did not lead to any result except the discovery of a fragment of mosaic. These columns belonged to Coptic churches, the Coptic cross was engraved on several of them.

We dug also near the huge granite bases which looked like Roman work. The excavations showed that they had supported two large columns at the entrance of a Coptic church now entirely destroyed, but of which nearly all the materials were left. They consisted of columns in gray marble with Corinthian capitals, some of which had a Coptic cross, besides architraves

and friezes well sculptured with flowers, arabesques and animals, and even parts of mythological subjects.

In digging in a great depression in the western part of the mounds, at a depth of about four yards, we at last hit upon a granite monolithic column, complete with a palmleaf capital; we found that we had reached a vestibule which must have been one of the side entrances of the temple of Heracleopolis. The remains of it consist of six columns 17 feet high, one of which only is complete, with sculptures representing Rameses II making offerings to various divinities, and in the intervals the name of Menephtah, the son of Rameses. [One of these is now in Philadelphia, see p. 450.] The architraves which were supported by those columns are cut in a building with the cartouches of Usertesen II of the XII dynasty. The six columns were in one line—the length of the vestibule is 61 feet; it was open on the waterside, the basements of the walls on the three other sides and even a few layers of stones have been preserved. This basement is in hard limestone of Gebel Ahmar, which cannot be burnt for lime; it bears in hieroglyphs, sometimes more than two feet high, the following inscription:—*the living Horus, the mighty bull, who loves Ma, the lord of panegyrics like his father Ptah, Tonen, King Rameses erected this building to his father Hershefi (Arsaphes) the lord of the two lands (Egypt).* It appears from this description that the temple was dedicated to Arsaphes, a form of Osiris, generally represented with a ram's head. This divinity is sculptured on two of the columns. The vestibule contained statues of which there are a few remains. On the southern side in the corner was a sitting statue of Rameses II of heroic size, in red limestone. We found it broken at the waist, but nearly complete. It was painted in bright red color, still very vivid on some parts of the throne; the stripes of the head-dress were alternately blue and yellow, like the granite Rameses II now at Geneva, which I discovered at Bubastis. [This statue is now in Philadelphia, and a description of it is given on pp. 449–50, and a reproduction on PLATE XXVI.] The inscription on the lower part of the base is a dedication to Arsaphes. On the same side was the bust of a red granite statue of natural size, without any name, and also a group of two very weathered kneeling figures. In the opposite corner was a statue of Rameses II symmetrical to the other, but broken in several fragments. The head had disappeared.

From the vestibule a door led into the inner part of the temple. We had great hopes that behind the basement of hard limestone, we should find constructions of importance, but our disappointment was complete. The temple, except the vestibule, was built of soft white limestone, and the result of it is that it has been entirely carried away. We saw, still in sites, bases of columns more than four feet in diameter, showing that they must

have been of considerable height ; but except a few stray blocks, here and there, with a few hieroglyphic signs, the whole temple of Arsaphes has been destroyed and employed for building purposes ; then the material was taken for the Roman temple and for the Coptic churches of which there were several ; so that we can assert that beyond this vestibule nothing remains of the temple of Arsaphes. The considerable excavations which we made all around down to the original pavement show that there is no hope of finding any more traces of this famous building, the principal sanctuary of Hanes.

AKHMÎM.—**TEXTILES FROM THE NECROPOLIS.**—At a meeting of the Society of Antiquaries on Nov. 26 Dr. Budge exhibited a Coptic grave-shirt from the collection of Sir F. Grenfell, and read a paper upon the textile fabrics found at Akhmîm. Examples of the Egyptian worked linen of the Roman and subsequent periods were comparatively unknown until 1882, when a very large find of worked linen garments, belonging to a period beginning with the second and ending with the eleventh century A. D., was made at Akhmîm, a modern town in Upper Egypt, which stands near, or perhaps upon part of, the site of the Panopolis of the Greeks, a city famous for the worship of the ithyphallic god Amsu, and, according to Strabo, for its linen-workers and stone-cutters. The necropolis at Akhmîm differed from every other in Egypt. The bodies were not mummified, although it is clear from the crystals found in the folds of the tunics, *etc.*, that salt or natron was used in the preservation ; they were laid on a board, and some wore, in addition to the tunics now so well known, stockings and sandals, caps, necklaces, rings, bracelets, crosses, and other ornaments. The smaller objects found at Akhmîm are well represented by a collection given to the British Museum by the Rev. Greville Chester in 1886. The textiles from this place belong to three periods, which are described as Roman, Transition, and Byzantine, and each is marked by peculiarities of work and design in the garments which cannot be mistaken. The designs of the first are classical, and are finely executed ; in the second the heathen designs give way to Christian emblems, and are of inferior work ; in the third vivid polychrome medallions and borders become the fashion, and the Byzantine character of the designs and work is unmistakable. Owing to the wasteful way in which the Akhmîm find was worked, comparatively few of the results which it was reasonably hoped might be obtained were realized. The Coptic grave-shirt exhibited was of great value, for it is complete, and it is possible to learn how the ornamental bands and medallions were arranged. The garment was woven in one piece in the form of a cross, the greatest length being about 9 ft. 6 in., and the greatest width about 5 ft. ; it was folded in half horizontally, and the longer arms of the cross formed the back and front and the shorter arms the sleeves. Where the fold came

a slit was cut for the neck, and the edges were first hemmed and then sewn with a chain-stitch in bright red linen thread. On the breast and back designs woven into medallions in dark purple were carefully sewn, and two long strips, formed of small rectangular designs of men and animals, extend from them down to the bottom edge of the garment; on each shoulder and over each knee is a rectangular medallion, and around each wrist is a band ornamented with figures of the hare, the emblem of the resurrection. The edges of the garment were hemmed together, and thus the body and the sleeves were complete. This valuable garment belongs probably to the end of the sixth or the beginning of the seventh century, and is one of the most perfect known. The number of the threads vary from fifty-three to fifty-eight to the inch.—*Athenæum*, Dec. 5.

ALEXANDRIA.—PANDOITIS.—Towards the end of May last an interesting marble altar was disinterred from the cliff at Alexandria immediately below the Ramleh station, and among the remains of a building of large squared stones. One side of the altar is inscribed with Greek letters of the third or fourth century B. C., and contains a dedication by a certain Ammonarin, the son or daughter of Herod, "a citizen," to "the fair goddess in Pandoitis." We may, therefore, conclude that the district of Alexandria in which the building was situated was called Pandoitis, that being perhaps the name of one of the thirty villages on the site of which Alexandria afterwards stood.

GABBARI.—Dr. Botti has drawn attention to some *ushebtis* of the time of the XXVI Egyptian dynasty, which have been discovered in tombs at Gabbari, on the eastern side of Alexandria. They prove the existence of an Egyptian settlement near the spot long before the age of Alexander the Great, and he therefore concludes that the necropolis of Rakotis, the Egyptian predecessor of Alexandria, must have been at Gabbari, Rakotis itself being situated in the immediate neighborhood.

REVIEW AND MUSEUM.—For the past three years a periodical, called the *Rivista Quindicinale*, has been published every fortnight, which contains archæological articles of the highest interest, as well as a record of the discoveries of inscriptions and other ancient monuments found from time to time in Alexandria and its neighborhood. The larger number of these articles are from the competent pen of Dr. Botti. The *Rivista* is the organ of the *Athenæum*, which, under the presidency of Sir Charles Cookson, has just entered on its second lecturing season, and is engaged in establishing a library and museum specially devoted to the remains of Greek and Roman antiquity discovered in Egypt. The want of such a museum has long been felt, and Alexandria is the most appropriate locality in which it could be placed. Negotiations have been carried on with M. Grébaut for the removal from the Cairo Museum of objects belonging to the Græco-

Roman period, most of which are still lying unpacked on the floors at Gizeh.—*Athenæum*, Nov. 14; *Academy*, Nov. 28.

BENI-HASSAN.—The necessity for immediate action in the case of the Beni-Hassan tombs is well shown by Miss Edwards in her "Special Extra Report on the season's work at Ahnas and Beni-Hassan." To none of the archæologists who studied the tombs from the beginning of this century did it occur to transcribe all the texts or copy all the frescoes, which is much to be deplored, as they are now in a far less perfect condition. This task was undertaken and has already been nearly completed by Messrs. Frazer and Newberry, as a first instalment of the Survey of Egypt undertaken by the E. Exploration Fund. We append a summary of their report for the past winter.

Even the drudgery of clearing out some of the tombs had its reward *per se*; for among the objects in the débris were found the ancient stone chisels used to smooth down the walls of the tombs. "They are chipped out of the boulders which abound here," says Mr. Frazer; "the material being a hard, fine, crystalline limestone." Interesting fragments of Coptic pottery were found in several of the tombs. Of the tombs, not less than thirty-nine in number, twelve bear inscriptions, and eight contain wall paintings. Each painting may be described as an illustrated page, on a gigantic scale, from the history of social and daily life, under the XI or XII dynasties. In the tableaux appear striking facial characteristics, ethnologically valuable, and they are interlarded with biographical material respecting the governors or princely monarchs, that is not only genealogically interesting but casts light upon the particulars of local government, or, as we would say, state or local rights, in Egypt. We recall the celebrated group of the Amu in one of these tombs, that of Khnum-hotep II, and their Jewish type of features. Mr. Newberry has made a like discovery: "I have discovered a group of foreigners which finds a parallel in that of his grandson, Khnum-hotep II. The scene here represents seven persons being led by an Egyptian officer. Three of the seven figures are warriors with yellow skin, blue eyes (now turned to green), and thick and matted red hair, in which are stuck five or six ostrich feathers. They are clothed in red garments, fringed at the bottom; in the right hand they carry ostrich feathers; in the left, a curved club. The remaining four figures of the group represent women. They, also, are fair skinned and blue eyed, and have light brown or red hair. Two of them carry children in a basket slung over their shoulders, and two carry a red colored monkey on their backs. These peculiarities point to their being Libyans. A fac simile of the group, of the size of the original, has been made by Mr. Blackden, uniform with the rest of his full-size fac similes of the wall paintings of this group of tombs. It is extraordinary that this group of Libyans should have been overlooked, not only

by the artists of the French Commission, but by Lepsius and all subsequent travellers."

The longest inscription—a memoir of the great Khnum-hotep—is no less than 222 lines. In Kheti's tomb no less than 150 groups of wrestlers tumble, and toss, and twist in every conceivable attitude; in the tomb of Baqta III is a whole ark of animals and birds let loose, each with its ancient name appended in a bold hieroglyphic hand. Nearly all the scenes are named and minutely specified. Mr. Newberry remarks regarding the plan and results of their work: "At the present time there are about 12,000 square feet of painted wall surface in the group; in former times there must have been considerably more. Much of this is in a fearful state of dilapidation, and year by year it is getting worse. Large flakes of painted plaster are falling from the walls; many of the scenes have faded away so completely as to be hardly distinguishable, and in a few years' time, if active measures are not taken to preserve the tombs, little will remain on their walls to tell of their former beauty. Knowing that they could do but little, if anything, to arrest this work of mutilation and destruction, the committee of the Egypt Exploration Fund decided to at least preserve a faithful record of what yet remains, and it was with the object of making plans, tracings of all the paintings, and colored copies of the most interesting scenes, that Mr. Fraser and myself (and later on, Mr. Blackden, an artist of great ability), proceeded to Egypt last winter. We worked there during the whole winter season, and far on into the spring, and by means of ladders, a trestle and tracing paper, succeeded in doing nearly all that could be done 'to preserve a faithful record of what yet remains.' The tombs have been surveyed and planned by Mr. Fraser, and I have brought back to England outline tracings of all the wall paintings in six out of the eight painted tombs, as well as copies of all the hieroglyphic inscriptions, a fine series of colored drawings by Mr. Blackden, and nearly a hundred photographs. At the present time I am preparing this mass of material for publication, and in my forthcoming volume,¹ which I hope will be ready for distribution to subscribers in March next, I shall give in the plates drawings of the scenes, which are still preserved. The book will also contain full explanations of all the scenes, with hieroglyphic texts and translations."

"The tombs whose wall paintings have been copied are those numbered 2, 14, 15, 17, 21 and 23: these have been traced in outline; and fac-simile drawings in color have been executed by Mr. M. W. Blackden of some of the most interesting scenes, hieroglyphs, musical instruments, implements, etc. A large number of unpublished, and hitherto unknown inscriptions

¹ *The First Memoir of the Archæological Survey of Egypt.* Egypt Exploration Fund: Rev. W. C. Winslow, Boston. Price, \$5.00.

have been brought to light. Among these are several of particular historical interest. One records that a certain Khnumhotep was installed as prince of Menat-Khufu by Amenemhat I: this prince was undoubtedly the maternal grandfather of the celebrated Khnumhotep the son of Nehera, whose magnificent tomb is the chief feature of interest at Beni-Hasan. Another inscription gives the name, and remarkable titles of the elder Khnumhotep's wife and the name of his mother. Several other inscriptions relating to the same powerful family have also been discovered, so that we can now trace its history through no less than five generations, from the time of Amenemhat I, through the reigns of Usertesen I and Amenemhat II, to the sixth year of the reign of Usertesen II. The group of Semites in the tomb of Khnumhotep II finds a parallel in that of his grandfather of the same name.

I may add that I have found evidence which proves that the majority of the tombs in the southern group (namely the tombs of Bagt, Kheti, Remushenta, Bagta I and Bagta II) date from the XI and not the end of the XII dynasty, as has been generally supposed."

The harvest of small unpublished inscriptions is a very abundant one, and several corrections of the first importance have been made in the great inscriptions that have been already published many times. From every point of view Mr. Newberry is to be warmly congratulated on the results of his first venture in the field of exploration. His determination of the age of the southern group at length makes it possible to trace the development of tomb architecture during the middle kingdom, from the Heracleopolite tombs at Siut down to those of the XIII dynasty at El Kab.

THIS WINTER'S WORK.—Messrs. Newberry and Fraser have been busy with their second season's work, which will be to survey, copy and photograph the remaining historic antiquities from Beni-Hassan, southward towards Tel-el-Amarna, including the rest of the Beni-Hassan tombs, the towns of el-Bersheh (XII dynasty), the Speos Artemidos, and the tombs of Isbêdeh. They are accompanied not only by Mr. Blackden the artist but by an assistant copyist, Mr. Carter. Early in December they had completed the survey and transcription of the tombs of Beni-Hassan, and had shifted their camp to the ravine of El Bersheh, a little higher up on the same bank of the Nile. They report the discovery of no less than five inscribed and painted tombs hitherto unknown to Egyptologists in this district. All are much dilapidated, the walls having mostly fallen in; but they hope to recover many important historical particulars of genealogy and local history from the inscribed fragments with which these new grottoes are strewn. They are much choked with bushes and *débris*, and need careful excavation. The damage done to the famous tomb of the Colossus on the Sledge

appears to be even greater than the reports of tourists had led us to expect. —*Academy*, Dec. 26; *Biblia*, Jan., 1892.

HAT-NUB.—ALABASTER QUARRY.—While at El-Bersheh, Mr. Newberry received hints of the existence between it and Tel-el-Amarna of the famous quarry of Hat-nub, still marked with the cartouches of early kings, for whom Una and other high officers conveyed thence the great altars of alabaster to their respective pyramids. A visit showed that deep in the hills among the ravines was a large excavation, outside of which lay masses of limestone and alabaster chips, while inside were painted or engraved the names of Chufu, Pepi, and Merenra. A specimen of the rock shown to Mr. Petrie was pronounced to be "the fine grained kind, exactly like that used in the Old Kingdom, and not like that used by Khuenaten."

Messrs. Blackden and Fraser examined the place and its neighborhood, and copied the inscriptions. They found the name of Hat-nub five times, and cartouches or short records of the following kings: Chufu of the IV dynasty, Pepi (25th year), Merenra, and Pepi II of the VI dynasty, User-tesen I (30th or jubilee year) XII dynasty. They also found another smaller cave-like quarry, several miles distant from the first, with the cartouches of Amenemhat II and Usertesen III, both of the XII dynasty. There is only one inscription of any length, and it is in very bad condition.

From the larger of the two excavations a well-made road or causeway led to the broad sandy plain on which, at a much later date, Khuenaten founded his new capital of Khutaten, and several stelae of this king—perhaps boundary stelae—were observed in the direction of the quarries. It remains to be seen whether their position had been entirely forgotten in the Hyksos period between the XIII and XVIII dynasties, or whether a change of taste or exhaustion of the supply led to their abandonment.—F. L. G.

LUXOR.—DANGER TO THE TEMPLE.—Mr. Henry Wallis writes to the *Academy*, July 26, calling attention to the danger threatening the temple of Luxor from two causes—the weakening of the embankment and of the foundations of the temple and the removal of the supporting earth from columns and walls without the supervision of a trained engineer. Some of the columns have already begun to topple. Col. Ross, the Inspector-General of Irrigation, is asked to give more careful personal attention to the action of the Nile current against the east bank. Attention is also called to the fact that many of the sculptures uncovered a few years ago, then firm and hard, are now crumbling under the action of the atmosphere because their surfaces were not treated.

MASSOWAH.—The provisional Governor of the Italian colony of Massowah is about to found an archæological museum for all the antiquities of the district. It is to be hoped that excavations will be made amongst the ruins of Adulis, whence came the famous *Monumentum Adulitanum*, which

was anciently copied by the monk Cosmas Indicopleustes, but cannot now be found.—*Athenæum*, Sept. 26.

SAIS.—AN EARLY SETTLEMENT OF KARIANS.—During the past summer an important find of bronzes has been made on the site of Sais. Figures of large size have been discovered, including a considerable number of figures of the goddess Neith. Most of these have found their way into the hands of the dealers.

Prof. Sayce writes: "Danninos Pasha has been kind enough to allow me to take a copy of a very interesting and important inscription which is now in his possession. The inscription is a long one, and is engraved in hieroglyphs of exquisite form on the three sides of a bronze pedestal of a large bronze statue of the goddess Neith, discovered this summer among the ruins of Sais, along with many bronze figures of the Pharaonic period. Above the hieroglyphs on the front of the pedestal runs a line of Karian characters. According to the hieroglyphic legend, the statue was dedicated to Neith and Horus by Si-Qarr, a name in which Danninos Pasha is doubtless right in seeing the Egyptian words 'the son of a Karian,' though, in another part of the inscription, the Egyptian name of the dedicator is stated to be Pe-tu-Neith, 'The gift of Neith.' Si-Qarr is called the son of Kapat-Qar, 'Kapat the Karian,' 'born of the lady of the house Neith-mert-hâ-Uah-ab-Ra.' The name of the 'prince' Uah-ab-Ra or Apries is not enclosed in a cartouche, showing that he did not claim royal rank. Si-Qarr is further styled an officer of Psammetichos I, both of whose cartouches are given. It is therefore evident that the prince of Sais, whose name is included in that of the mother of Si-Qarr, must have been a predecessor of Psammetichos I; and since we know from the Assyrian monuments that the father of the latter was called Necho, while Apries was a family name among his descendants, we must conclude that the Apries of the statue was the hitherto unknown grandfather of the founder of the xxvi dynasty.

"Another interesting historical fact results from the inscription. As the Karian father of Si-Qarr married an Egyptian whose name indicates that she was a native of Sais, we may infer that Karians were settled in that part of the Delta long before the time when their aid was invoked by Psammetichos I. Polyainos (*Strateg.* vii) is thus shown to be more correct than Herodotos in his reference to the settlement of the Karians and Ionians in Egypt. It also proves that Lepsius was right in regarding certain inscriptions found at Abu-Simbel and in other parts of Egypt as of Karian origin. It also shows that the founder of the xxvi dynasty gave evidence of his appreciation of the services rendered to him by the Karian mercenaries by appointing one at least of them an officer of his court. A bilingual inscription on the pedestal of a small bronze Apis now in the Gizeh Museum, which

I have published in my memoir on the Karian texts, had already confirmed the statement of Herodotos, that in the later days of the dynasty the Karians had acted as dragomen; we now know that at an earlier period they could be raised to offices of state. Lastly, we must not forget that the newly found inscription is bilingual, and will, therefore, assist us in the decipherment of the Karian alphabet. On this point I shall have something to say on a future occasion."—*Athenæum*, Nov. 14; *Academy*, Nov. 21.

TELL-EL-AMARNA.—Mr. W. M. F. Petrie has established his headquarters this season at Tel el-Amarna, and is busily engaged, with a gang of native laborers, in clearing the ruins of the palace of Khu-en-Aten, the "heretic king."—*Academy*, Dec. 26.

UGANDA.—Dr. Peters, in his *Die Deutsche Emin Pasha Expedition*, presents a mass of new material on the high culture of ancient Uganda, arguing for its dependence on the civilization of ancient Egypt. He first discovered there thirty-three pyramid-shaped tombs of kings containing old literary documents, and the like.—*Biblia*, Aug., 1891.

ALGERIA.

ROMAN HYDRAULIC SYSTEM.—It is well-known that Roman Africa was thickly settled and highly cultivated. M. de la Blanchère has been for ten years studying the means which the Romans employed to reach this result which is impossible under present conditions. He presented his report to the *Académie des Inscriptions* on December 18, 1891. The difficulty was not in the absence of water but in the unequal distribution of the fall through the year, some months being excessively moist, others (five) correspondingly dry. The remedy was sought by the Romans in a network of hydraulic works by which all the water from the tops of the mountains to the sea was caught, conducted and distributed not isolatedly but in one general system. In the small mountain ravines there were rustic dykes of dry stone to hold the water, in the glens other dykes arrested the course of the waters already gathered; at the entrance of every large valley a system was in use not only to secure the watering of the land but the passing through of the waters with the requisite slowness. Where each large ravine opened on the plain a strong construction for storage and distribution prevented sudden inundations. M. de la Blanchère took as a type the hydraulic system of the Enfida, a region situated on the borders of Zeugitanis and Bizacium and exemplifying the custom in both regions. Remains of similar works are found not only in Mauretania but throughout Roman Africa. Several centuries were spent by the Romans in attaining perfect results and the time of perfection is the third century of our era. Civil wars, especially the religious feuds, led to the neglect and finally to the decay of these works, and

the Arabic invasion together with the clearing of the forests gave them their last blow.—*Ami des Mon.*, 1891, No. 28, pp. 385-6.

TIMGAD.—A ROMAN CITY.—M. Cagnat has written a long report, which has been presented to the *Acad. des Inscr.*, regarding the excavations carried on during the past ten years at Timgad, the ancient *Thamugadi*, especially under the direction of M. Duthoit. The ruins of the city are at present in the same condition as when it was destroyed by the Moors on the approach of the Byzantine army. Broad paved streets have been uncovered, bordered on each side by triumphal arches—one of which is still almost intact—also an entire forum, a theatre and a curious market. All these buildings were constructed at the same time and on a carefully determined general plan, during the first half of the second century of our era, as was proved by inscriptions found during the excavations. It was a creation of the imperial authority which wished to establish a flourishing centre of civilization in the midst of a recently pacified region.—*Revue Crit.*, 1891, No. 22.

TUNISIA.

EL-MATRIA.—At this place a temple erected in honor of Jupiter *optimus maximus*, of Juno and Minerva, was unearthed, and work was commenced on a number of other monuments.—*Ami des Mon.*, 1891, p. 376.

SLOUGHIA.—ROMAN STATUES.—On the Sloughia road two Roman marble statues have been found, in perfect preservation, as well as the upper part of an interesting stele. Excavations are being systematically begun on the site. The sculptures have been sent to the Bardo Museum.—*Chron. des Arts*, 1892, No. 3.

TUNIS (NEAR).—SANCTUARY OF BAAL.—M. Toutain, member of the French School of Rome, has discovered on the top of a hill near Tunis called Bou-Karneïn, the sanctuary of a Romanized Baal: SATVRNVS BALCARANENSIS AVGVSTVS · · DOMINVS · · DEVS MAGNVS. The excavations yielded some five hundred fragments of steles and inscriptions, a number of which are of considerable interest, a large series of texts perfectly intact, with several new consular dates. On June 17 last, the excavators began to uncover one of the corners of the building in which these finds were made, doubtless the foundations of the temple. A part of the antiquities found are to be placed in the Louvre.—*Revue Crit.*, 1891, No. 27.

MOROCCO.

EXPLORATIONS OF M. DE LA MARTINIÈRE.—At two meetings of the *Acad. des Inscriptions*, M. de la Martinière reported on the results of his last mission to Morocco. He explored the Sous and passed the Atlas, meeting in distant districts peculiar ruins which he attributes to the period between

the Byzantine dominion and the coming of Idris. He visited the fanatical and inaccessible city of Taroudant, and found at Agadir Sirir, capitals and other fragments of distinctly Byzantine style which elucidates the Byzantine dominion in this region. He gave details regarding the antiquities of the mountainous region of Djebel Zerhoun and especially the city of Volubilis, whose numerous inscriptions found by him constitute thus far almost the entire *Corpus* of Latin Epigraphy of the province of Tingitana.—*Revue Crit.*, 1891, No. 40.

SOUTHERN AFRICA.

ZIMBABYE=OPHIR (Mashonaland).—In 1871, Karl Mauch described some ruins which he discovered in Mashonaland, on the Takoué, an affluent of the Loundi in Southern Africa. Mr. Theodore Bent, already well known by his numerous discoveries, concluded that an examination of these ruins, called Zimbabwe, would throw new light on the part of this region, and in December, 1890, the Royal Geographical Society made him a grant of £200 for such a journey. The ruins were explored and appeared to be of Phœnician character. An enclosure, 260 ft. in diameter, filled with phallic emblems appears to have been the site of a temple dedicated to the fruitful powers of nature. There was a large and high tower which the explorers were unable to enter. There were many walls, staircases cut in the rock, arches, caves finished with masonry. The natives had discovered a phallic altar covered with carvings of birds with a frieze representing a hunting-scene in which a man, holding a dog in leash, is firing javelins at four quaggas, while two elephants stand in the background. There was also found blue and green pottery, apparently of Persian origin, and a copper blade covered with goldleaf. No inscriptions came to light. The identification of Ophir with Zimbabwe is very probable. The region of Mashonaland is very rich in gold, and the site, near the Zambesi in the interior of Mozambique, harmonizes with the hypothesis that places Ophir not far from Sofala. The Phœnician vessels would have passed from the Red Sea to the Indian Ocean and at Sofala have gone up the river Sabi.—*Ami des Mon.*, 1891, No. 28, pp. 355-63.

ASIA.

HINDUSTAN.

* **GRÆCO-ROMAN INFLUENCE ON INDIAN ARCHITECTURE AND SCULPTURE.**—Mr. Vincent A. Smith has published, in the *Journal of the Asiatic Society of Bengal*, a paper entitled *Græco-Roman Influence on the civilization of ancient India*. He starts with the proposition that the introduction of stone instead of wood into Indian architecture and sculpture was due to the in-

fluence of Alexander's successors. But he confines his study almost entirely to the remains found near Peshawar on the extreme n. w. frontier. The ancient name of this province was Gaudhara, and it included the great cities of Purushapura, Hashtnagar, Taxila, and Manikyala. The principal collection of these Gaudhara sculptures is in the museum of Lahore; next comes that in the India museum, Calcutta; others are in the British Museum, at South Kensington, and at Woking. One class, not at all numerous, is properly Indo-Hellenic, and dates from the beginning of the Christian era: it includes pillars of the Ionic order found at Taxila, with coins of King Azes (30-20 B. C.); also a statuette of Athena in good Greek style. The second and far more numerous class Mr. Smith regards as Indo-Roman on account of both style and date. The architecture and decoration are florid Corinthian, as at Palmyra and Baalbek; small human figures are introduced among the acanthus leaves as at the Baths of Caracalla. The reliefs representing the birth or death of Buddha, the mythological monstrosities, the comic friezes, all imitate Græco-Roman art. In a number of cases there is even a close analogy to Christian sarcophagi of the Roman Catacombs. Mr. Smith concludes, that the school of Gaudhara art probably owed its origin to the Syrian expeditions of the Emperor Hadrian (117-138 A. D.), the distinctively Roman influence being derived from Palmyra; that its highest development was contemporary with the Antonines (middle III cent.); that its closest relationship is with the Christian sculpture of the Catacombs (250-450 A. D.); and that it became extinct by the sixth century. Mr. Smith discusses the cognate questions of the Greek origin of Indian painting, the debt of the Indian to the Greek drama, and the influence of Hellenic sculpture in encouraging idolatrous practices. A special chapter is devoted to the history of coinage.—*Academy*, Sept. 5.

MONUMENTS OF MADRAS.—So long ago as 1883, the Government of India passed resolutions for the conservation of ancient monuments, and directed that lists should be drawn up for each province. Such a list was compiled for Madras by Dr. Burgess and Mr. Sewell in 1885, which comprised more than 500 monuments, and 300 more have been added in a subsequent list. Last year the Government issued a fresh resolution, imposing a more stringent duty of conserving ancient monuments upon the several departments of public works. Accordingly, a new list has been drawn up for Madras by Mr. Alexander Rea, superintendent of the archæological survey of Southern India, who is, we believe, an architect by profession. The number of monuments is reduced to 108, selected as typical of the architectural periods to which they belong, and each of them has been personally inspected by Mr. Rea. The following is the classification adopted: Buddhist remains (250 B. C. to 500 A. D.), only in the north; Pallava caves and structures (500 to 700 A. D.); Chola and Pandyan temples (from the eleventh century), chiefly in the south; Chalukyan temples (twelfth to

fourteenth century), confined to Bellary; Jaina temples (from the fourteenth century); later Dravidian temples, including those at Vijayanagar; examples of civil and military architecture; Christian remains, principally Dutch tombs. Suggestions are made for the better maintenance of each monument; and, finally, attention is called to the importance of keeping untouched the numerous prehistoric stone enclosures and ancient mounds which are to be found throughout the country.—*Academy*, Dec. 26.

BELLARY.—**DISCOVERY OF DRAVIDIAN PREHISTORIC REMAINS.**—Mr. Sewell writes of discoveries near Bellary in the Madras Presidency:

"The Bellary district abounds in prehistoric remains, being rich in burying-places with rude stone circles, and dolmens, wherein have been found well-preserved pottery and other remains; so-called 'cinder-mounds,' consisting of a material believed to be tufa, but of which the use has never yet been discovered; with a great quantity of celts, mealing stones, scrapers, *etc.*, mostly neolithic. Four miles east of Bellary is a village called Kapgal, lying underneath a rocky hill, of which the visible surface in many places consists of nothing but a mass of large boulders piled one on top of another. The eastern end of this had long been known as a fine quarry for celts and other prehistoric remains, while close by in the plains are the remains of a very early settlement with stone-circles and two very curious tufa-mounds. Not long since I visited the place with Mr. Fawcett, and, scrambling amongst the upper rocks, where probably few Europeans have set foot, we found a very large quantity of ancient drawings on the surface of the boulders, consisting of men and animals and other devices. Afterwards questioned, the villagers said they had been made by the gods, or rather a god. They are evidently of extreme antiquity for various reasons. In one or two instances the men's figures have apparently headdresses of long feathers, implying the existence of barbaric customs unknown in the locality at present. The oxen represented are different from the breed now known. Some of the drawings are very lifelike and skilful. I say drawings, but they are really chippings, the figures being cut on the surface of the dark rock by a succession of blows from some hard substance. Mr. Fawcett intends to prepare a paper, illustrated by drawings and photographs, on this very interesting subject—Dravidian prehistories in this locality, with special reference to Kapgal—and I think that his paper would be found one of great interest, if you would admit it. The study of the Indian stone age is yet in its infancy, and it deserves all the encouragement that such a distinguished meeting as the Oriental Congress could give it."

The explorers are Mr. R. Sewell and Mr. F. Fawcett. The latter has just come home, bringing with him photographs and remains illustrating the carvings on rocks that he has found, and that point to a long extinct race and civilization. A report on this subject was made to the Oriental Congress in London.—*Athenæum*, Aug. 15.

KASHMIR.—EXCAVATION OF THE BHUTES'A TEMPLE.—DR. M. A. STEIN, of Lahore, is making excavations in the ruins of the Bhutes'a temple, situated at the foot of the sacred Mount Haramuk, Kashmir, at an elevation of 7,600 feet.—*Athenæum*, Sept. 12.

MATHURA.—APPEAL FOR FURTHER EXCAVATIONS.—On various occasions most interesting information has been given as to the results of Dr. Führer's explorations of the Buddhist and Jain sites at Mathurâ (Muttra). His further progress is hampered by want of funds. He estimates that the small sum of Rs. 6000, or about £420, would enable him "to do Mathurâ thoroughly," and appeals for help.

He says, in a letter: "I have finished the excavation of the Kankâlî Tilâ at Mathurâ, but there are still many others which have never been touched, or but slightly searched. For instance, the Katra mound would yield very ancient documents of the Bhâgavatas, and the Sîtâlâ ghâti mound ancient Jaina works, like the Kankâlî Tilâ. The Chaubâra and Chaurâsi mounds have only been slightly excavated, and would give up many other valuable documents.

"According to my calculations, a sum of Rs. 6000 would be required to do Mathurâ thoroughly.—*Academy*, Nov. 14.

CHINA.

INTRODUCTION OF BUDDHISM INTO CHINA.—M. TERRIEN DE LACOUPERIE writes in regard to the introduction of Buddhism into China that he considers the date 219 B. C. as the earliest date that gives evidence of this fact. "In the third year of his imperial reign (219 B. C.) She Huang-ti goes to the Tai shan and to the seashore of Puh-hai (Gulf of Petchili, near Lai tchou) to offer sacrifices. Then he requests the presence of the holy men, Siennmen and his companions. Tzema Tsien gives Tze Kao as the name of this Shaman. In the thirtieth year of Tsin She Huang-ti (217 B. C.), the Western Shaman Li-fang, with seventeen others, arrives at Loh-yang with Sanskrit books. In his thirty-second year (i. e., 215 B. C.) She Huang-ti goes to Kieh-shih (in Liao-si, near the present Tcheng-teh, Upper Petchili), and from there sends Lu-sheng, a native of Yen, to fetch the Siennmen Kao-she.

"The first Buddhist statue heard of in Chinese history is the golden idol carried off on the Hiung-nu Prince of Hiu-tu (north of present Liang-tchou in Kansuh), by the young commander Ho-Kiu-ping, in the spring of 121 B. C. The (probable) statement that it was Buddhist, which is not in the original text of the *Tsien Han Shu*, is an addition of a commentator.

"The expedition of Siü-fu to the Fairy Islands in 219 B. C. is considered by Mr. Allen as Buddhist. The words of Tzema Tsien do not favor this view; but as the matter is peculiarly interesting if taken in connection with

other events, I must leave it for another occasion. Shamans, or Buddhist missionaries, were spoken of, as we have seen, on three different occasions, namely in 219, 217, and 215 B. C. The oldest is that which I have mentioned in my special paper, and I do not see any reason to modify my statement that this is the earliest date hitherto known for the introduction of Buddhism in China. After 215 B. C. no further mention of Sienmen occurs, I think, until 112 B. C., and then only in a passing way. Luan-ta, an adept in magical arts, and a native of Kiao-tung (near the present P'ing-tu tchou in Shantung peninsula) was presented to the credulous emperor Han Wu-ti, whom he persuaded that he had travelled by sea, and seen the residence of Ngan-K'i sheng (a famous magician of the fourth century) and of the Sienmen. His boasting shows, in any case, if nothing more, that Sienmen had ceased at that time to inhabit any part of the Chinese dominion, and that their former presence in 219-215 B. C. had been an unsuccessful attempt."

SIBERIA.

TCHUDIC INSCRIPTIONS.—M. Deveria has sent to the *Acad. des Inscriptions* information regarding the inscriptions called "Tchudic" which have been collected for the last two centuries in Siberia and Northern Mongolia and whose language and writing have not yet been deciphered. In 1890, M. Deveria had advanced the opinion that they must be anterior to the foundation of the Khanate of the Ouïgours (744 A. D.). This has been confirmed by a discovery made by M. Heikel, prof. at Helsingfors. Thirty kilometres south of lake Ougheïnor, in the Orkhun valley, he found a bilingual sepulchral stele one of whose faces had a Tchudic inscription, the other a Chinese inscription. The latter, dated in 732 A. D., shows us that the stele was erected to the memory of Prince Gueuk Teghia, brother of Mekilien, Khan of the Tou-Kiué Turks, who reigned from 716 to 731. It may be concluded that the monuments in question belong to this tribe of the Tou-Kiué Turks and that the materials for deciphering it are to be found in eastern Turkish dialects: the writing may henceforth be called Turco-altaïc. Two scientific expeditions have already started with the intention of gathering new material for the study of these questions. One is composed of Hungarians; the other, sent by the Scientific Academy of S. Petersburg, includes Mess. Radloff, Yadrintseff, Klements, etc.—*Revue Crit.*, 1891, No. 40.

Later News.—According to a telegram from Irkutsk, the Russian scientific expedition to Northern Mongolia, under the leadership of M. Radloff, has completed the objects of its mission. The expedition proceeded along the Orchon river as far as Karakorum, the ancient residence of the Mongolian emperors, and after pushing on to the Gobi desert, made explorations in the region to the south of the Changai range, where a number of

antique bas-reliefs and Runic inscriptions were found. M. Radloff eventually made his way back to Russian territory by way of Pekin. M. Jandrinzeff, a member of the expedition, has returned to Kiachta with collections of considerable value.—*Academy*, Oct. 3.

TURKESTAN.

SUBTERRANEAN SASSANIAN CITY.—An interesting discovery has been made near Kerki, a city of Bokhara, on the left bank of the Amu-Daria. Grottoes were found, which formed a labyrinth of catacombs extending over a distance of several kilometres and forming as it were the vestibule of a subterranean city. They still contained furniture and utensils and gold and silver ornaments, and the coins that were picked up dated from 226 to 642 of our era, the period of the Sassanidae. The materials employed are alabaster and stalactites. It appeared as if this vast subterranean city served as a refuge for a civilized population against the attacks of pillaging nomads. The Archæological Society of Moscow is to send a commission to the site.—*Ami des Mon.*, 1891, No. 28, pp. 363-5.

PERSIA.

TRANSFORMATION OF PERSIAN WORSHIP.—M. Dieulafoy has made an interesting study on the transformation of ancient Persian worship. Basing himself on Darius' inscription at Bissitum in which he speaks of rebuilding the religious structures (*âpadanâ*) demolished by the Magi, and on a text of Herodotos which declares that the Persian religion requires no temple, M. Dieulafoy seeks to prove that fire-worship required perfectly closed structures, consequently religious structures. This was proved from the *Avesta*, the figured monuments, two passages of Strabo and Pausanias, as well as by the tradition and plan of the *dadgah* (legal place) of the Persians. On the other hand, this structure would not be called a temple or *naos* by Herodotos, because it had no statue, no altar for sacrifices, and no victims could be sacrificed even in its neighborhood. It was characterized merely by a lighted brazier. This is confirmed by an *âpadanâ* of the time of Artaxerxes-Memnon found during his discoveries at Susa. M. Dieulafoy was able to fix almost to a year the date of the final transformation of the ancient Mazdaism into the Avestic Mazdaism characterized by the substitution of symbolic for bloody sacrifices, which took place at the time of the construction of the *dadgah*.—*Ami des Mon.*, 1891, pp. 382-3.

ARMENIA.

TRAVELS OF MESSRS. HYVERNAT AND MULLER-SIMONIS.—Professor W. H. HYVERNAT of the Washington Catholic University, and Dr. PAUL MULLER-SIMONIS of Strasbourg, have published a volume on their travels

in the Caucasus, Armenia, Kurdistan, and Mesopotamia, undertaken as a mission sent out by the French Government. The volume, of nearly 600 pages, contains 210 illustrations of various kinds, and a map, in minute detail, of the countries the two travellers have visited, together with many new geographical items. There is also an appendix on the cuneiform inscriptions of Armenia, and on the results obtained from them for the ancient history of the country, together with a catalogue of the inscriptions, amongst which are about thirty hitherto quite unknown. Finally, there is an essay on the identification of the geographical names of provinces and towns mentioned by Armenian geographers and historians with those given in Kiepert's later map of Armenia. A review of this important work will appear in a later issue of the JOURNAL.

BABYLONIA.

THE AMERICAN EXPEDITION.—We publish under *Correspondence* (pp. 472-5) a letter received from Dr. Peters, the Director of the expedition to Babylonia sent out from Philadelphia. This letter presents the geographical results and the general features of the excavations. As a supplement, we quote at length from a communication to the *Academy* of Sept. 5, made by Mr. Pinches, giving certain details of the excavations furnished him by Dr. Peters, and readings of some of the inscriptions.

"In a letter from Constantinople, dated July 27, Dr. Peters has communicated to me some of the important discoveries which he made in the course of his explorations. I herewith communicate the substance of the more important parts of his letter, with translations of the inscriptions quoted, and a few comments. Dr. Peters says: 'The fact has already been published that we found at Niffer, during the first year of our work, a stamp of Naram-Sin. The second year I found another stamp of the same king, and two of Sargon his father. I also found three door-sockets with votive inscriptions of Sargon of Agane. . . . At about the Sargon level we found several inscriptions of another king, apparently, therefore, of about the same age, who seems to be unknown. Here is one of his inscriptions on an alabaster vase from the temple of Bel.'

"I read the inscription as follows: 'Ērimuš (or Urumuš) king of the earth' (or 'the universe'), in Babylonian: *Eri-mu-uš lugal kiš*. As is now well known, the date of Sargon of Agade (formerly read Agane) is generally accepted as being about 3800 B. C., his son Narâm-Sin having reigned about 3750. Erimuš or Urumuš probably reigned, as Dr. Peters indicates, about the same period, and his name is a welcome addition to our knowledge. Dr. Peters's discoveries prove, moreover, that the city of Niffer was one of the most ancient in Babylonia, a fact which is also confirmed by the newly-found Akkadian (or Sumerian) story of the Creation,

published by me in the *Academy*, in which Niffer is the first city mentioned by name. The style of the inscription is the same as that of the inscriptions of Sargon of Agade already known.

"Dr. Peters then continues:—

'Here is also a rude inscription found on several door-sockets of about the same period . . .'

"The text which he gives I translate as follows: '(To) Bêl, his beloved king, Garde (?) has dedicated (this)' (*Ellilla, lugal kiaga-ni garde munaru*). The text is in five lines, and seems to be perfect. The reading Garde, though doubtful, is very probable. There is, however, no indication whether it is a royal name or not.

"Among the curious and interesting finds from the temple of Bel are a number of votive inscriptions, chiefly on lapis-lazuli, agate, and a chalk-like white stone, so soft that it had to be covered with a kind of enamel. These are all from one room, in a series of booths or shops before the temple, had all been contained in one box, and were in various stages of completion, showing, perhaps, that this was the shop of a vendor or manufacturer of *objets de piété*. The inscriptions on the bulk of these belong to Kurigalzu, son of Burnaburiash, but the largest and most important of the series bears the name of a king. . . . He should be approximately of the period of Kurigalzu, and he bears the title 'king of Babylon.'

"The name which Dr. Peters gives I read Kakašman-Turgu (written *Ka-da-aš-ma-an-tur-gu*), a variant reading of which (*Ka-da-aš-man-tu-ur-gu*) occurs on a small lapis-lazuli tablet. Another similar name, Kadašman-Bêl (*Ka-da-aš-ma-an-(D.P.)Bêl*), occurs on an agate tablet of the same series.

"This find of Dr. Peters is most important, for it furnishes us with the names of two Kassite kings, one wholly, the other partially, new. The name Kadašman-Bêl is evidently the same as that hitherto transcribed (erroneously) as Kara-Bel (by comparison with such names as Kara-Murudaš, etc.) Its meaning is '(my) trust is Bel.' At present a precise date for these two rulers, Kadašman-Turgu and Kadašman-Bêl, cannot be ventured on; but, as they were found along with a small tablet bearing the name of Nazi-Murutta (= Nazi-Murattaš), son of Durri-galzu (about 1345 B.C.), they probably reigned about that time. Dr. Peters adds with regard to this series that "one very pretty agate amulet bore on one side a finely cut inscription of Dungi, king of Ur, and on the other side a less finely worked inscription of Kurigalzu (= Durri-galzu)"—a combination interesting from more than one point of view.

"Dr. Peters then describes the inscriptions of Zur-Sin or Amar-Sin, which he found 'in a small two-roomed construction before the great wall of the temple of Bel.' They were on two diorite door-sockets, one at the outer

and the other at the inner door. The bricks of the building also bear his name.

"At MUGHEIR (or Mukeyyer) Dr. Peters found a brick "dedicated to the god (Ni-šum [?]), his king, by Kuri-galzu" (Durri-galzu), "restorer of En-lil-la," the powerful king, "king of Sumer and Akkad," &c. Dr. Peters then says:

"At Mugheir the natives had been digging out bricks for use either in building the new dam across the Hindiyeh canal, or for the purpose of building in Nasriyeh, opposite Mugheir, across the Euphrates. Lying on the surface I found a diorite door socket with a fine inscription of Gamil-Sin, which the Arabs had been trying to efface by hacking away the surface. A larger inscription on a block of stone had been entirely destroyed. Four brief and identical inscriptions of (Ur-Bau), the same which occurs on the bricks of the Ziggurat, were in various stages of effacement. The Turkish law absolutely forbids you to carry off such objects for yourself; and the sad experience of explorers shows that if you attempt to have them placed in the museum at Constantinople you involve yourself in manifold difficulties and expenses, and at the end they may never arrive at their destination. In Irak inscribed bricks are as the sands of the sea for number; but you may not take them, and the government will not give them transport to Constantinople. It is altogether a sad spectacle of waste and destruction."

"The name of King Erimuš or Urumuš seems also to occur on some fragments from Sippara (Abu-habbah) which Dr. Jensen has lately copied; but, if so, the same must, Dr. Jensen thinks, have been written Erimusu (or Urumusu)."—*Academy*, Sept. 5.

At present, the collection in Philadelphia contains more inscriptions of Sargon I, Naram-Sin, and his dynasty, than all other collections taken together.

EARLY BABYLONIAN OR ELAMITE SCULPTURES DISCOVERED BY M. DE MORGAN.—

A report on M. de Morgan's late mission to Persia has been communicated by M. Maspero to the *Acad. des Inscriptions*. He copied a number of cuneiform inscriptions that had been merely noticed by previous travellers. Two of them, belonging to the earliest period of Babylonian history, have been translated by Father Scheil. The longest, that of *Seripul*, is cut on Mount Batir, and is accompanied by a basrelief representing a king, in war-costume, slaying a captive whom he is trampling under foot, while the goddess Ištar, before whom he stands, brings to him numerous prisoners to undergo a similar fate. This relief commemorates the victories gained in this region by Anubanini, king of Lulubi. The second inscription is cut on a mountain 108 kilometres to the north of the first, near the village of Sheich-Khân. A king, whose name is unknown, has here carved his

image; a Babylonian prefect who long afterward came into the country, named Tar . . dunni, son of Sin-ipsah, restored the figure and commemorated the fact in a few inscribed lines.

The style of both reliefs and inscriptions is extremely archaic. A comparison with the sculptures of Telloh would lead to the conclusion that they are even older than these, and may be regarded as the earliest examples of Babylonian sculpture at present known. The impressions brought back by M. de Morgan will furnish very good casts from which the style can be judged.—*Ami des Mon.*, 1891, No. 28, pp. 384-5.

A REVOLT OF BABYLONIANS UNDER XERXES.—Professor Jules Oppert has made an interesting discovery. A Babylonian contract tablet, published by Father Strassmaier, is dated in the reign of a king called "Samas-Erba." The professor shows, from the names of the witnesses, that the contract was made in the year of the expedition of Xerxes against Greece, and that consequently the Babylonians must have taken advantage of the absence of Xerxes to revolt from Persian rule and establish a king of their own. This will account for the destruction of the temple of Belus, and for the punishment inflicted by Xerxes on the Babylonians after his return from Greece, which is mentioned by Greek writers.—*Biblia*, Jan., 1892.

A WEIGHT OF NEBUCHADNEZZAR.—A large weight of hard, green stone, highly polished, and of a cone-like form, has been discovered in Babylonia, probably on the site of Babylon. The picture of an altar has been engraved upon it, and down one side runs a cuneiform inscription of ten lines. They read as follows: "One maneh standard weight, the property of Merodach-sar-ilani, a duplicate of the weight which Nebuchadrezzar, king of Babylon, the son of Nabopolassar, king of Babylon, made in exact accordance with the weight (prescribed) by the deified Dungi, a former king."

Dungi was the son and successor of Ur-Bagash, and his date may be roughly assigned to about 2800 B. C. It would appear that he had fixed the standard of weight in Babylonia, and the actual weight made by him, in accordance with this standard, seems to have been preserved down to the time of Nebuchadrezzar, who caused a duplicate of it to be made.—*Biblia*, Jan., 1892.

ASSYRIA.

CUNEIFORM INSCRIPTIONS.—The Trustees of the British Museum will shortly issue the second instalment of Dr. Bezold's *Catalogue of the Cuneiform Tablets in the Kouyunjik Collection*. This volume will contain the descriptions of nearly six thousand tablets and fragments which formed part of the famous clay library preserved by the kings of Assyria at Nineveh. This library was founded by Assurbanipal, 668-626 B. C., and con-

tained also official documents which had been sent to Sargon and Sennacherib. In this volume will be found a classification of omen and astrological texts, a work which has never before been attempted; and a considerable number of important extracts are printed in the cuneiform characters.—*Athenæum*, Nov. 28.

SYRIA.

SENJERLI AND SAM'ALLA-LAND.—Mr. H. G. Tomkins, in a letter to the *Academy* of Sept. 26, proposes the following identifications. He says:

"In the last number of *The Babylonian and Oriental Record*, Mr. Boscawen gives some account of the discovery at Senjerli of inscriptions both Hittite and Assyrian. The German committee is at work in earnest, and the results are already highly important. My object, however, is to draw attention again to those interesting cross-lights which Egypt and Assyria throw on this North Syrian region.

"An inscription of Pan-ammu, king of Sam'alla (*t.* Tiglath-Pileser III, B. C. 745–727), found at Senjerli, appears to identify the ruined city with the state of Sam'alla, well known in Assyrian annals. Now in the North Syrian list of Thothmes III the name No. 314 is Sam'alua, which in 1885 I identified with Sam'alla, comparing the proper name of a prince in the Hittite confederation against Rameses II, Samalsa, which Lenormant had assimilated with the same local name (*Les Orig.* III, 275). Those who will now take the trouble to compare this Karnak List with the best maps (Rey and Blackenhorn) will see how curiously the names from 306 to 315 appear to belong to the same north-west corner of Syria towards Cilicia.

"(306), *Aibre*, I would compare with *Abrië*, the Assyrian way of writing the name of the Afrin river. (307) *Qarmatia* must, I think, be the ancient place Karamata (as Ainsworth writes it), or Karamat (Barker), or Karamûd (Sachau). To the west of the little place Karamata-Khân, Sachau saw at about half an hour's distance on a height the ruins of a great town of antiquity, which commanded the Bêlan Pass descending to the Amq Plain, whose name next follows. (308) *Amiq-u* (plural). Major Conder suggested that this was 'the present Umk plain, near Antioch.' The Assyrians called it Unqi, the great *Amyces Campus*, 'the corn-store of all Syria.' I trace the ancient form of the name in Ameuk-Keui, a place in the plain, and, I think, in Amgu-[li], the name of a small river and a mount to the east of the plain. Dr. Neubauer notes as a remarkable Arabic form in the Talmud אֲמִיק, applied doubtless to this very region. It appears to be very ancient (*Géol. du Talmud*, p. 53, note). There is also Amik-li in the valley of the Afrin, further north towards

Cyrrhuss. The next name (309) is *Katsel*, which seems to be the mountain mass Kizil Dagħ, north-west of Antioch: this seems to be the survival of a very ancient name, in modern Turkish. No. 310 is *Aumaia*, which, I fancy, may be the celebrated place Imma in the same plain, on the way to Aleppo, whose name, as that of the whole inclusive district, next occurs (311), *Khalebu*. Then comes (312) *Piaur*, literally Piaun-r. Lenormant proposed Pinara in Pieria; but, as the *n* sign is only used to strengthen the *r*, I think it may be taken as the name of the mountain region Pieria itself, north of the outlet of the Orontes, now called Jebel Mûsa. Then follows (313) *Aurema*. Ainsworth says that the 'Umk plain is called "sometimes the Umk of Uerem" (*Assyria, etc.*, p. 299). This would seem to be the identical name. There is Ūrûm-Keupri, south of Kyrrhus, in the Afrin valley also, and this is in the general direction towards Sam'alla land, which itself next occurs as (314) *Samâlua*; and our group ends with (315) *Akama*, which occurs in the Mohar's travels (Brugsch, *Geog. Insc.* II. 44) as the mountain of Akama. At present Akma Dagħ is the name of a western block of the Amanus mountains, from five to six thousand feet high, as Barker says (*Lares and Penates*). The name perhaps extended to the whole Amanus range in those old times, but at any rate it would seem to be the same.

"Next to this group of local names dependent on Aleppo the Karnak List takes us to the Euphratean region. But it is worth while to go back farther than our starting point to No. 292, which Prof. Maspero long ago proposed to identify with Dolikhê in Kommagene (Assyrian Kummukh). The Egyptian name 292 is *Talekh* or *Dalekh*; the place is now Dûlûk, north of 'Aintab, if it be Dolikhê.

"Taking the whole of these Egyptian data together in regard to the new information from Senjerli, how striking is the testimony to the interest of such explorations and studies! But may we not add a query on the present name, Senjer-[li]? The last syllable is just a Turkish suffix of locality. And may not Senjer [Senger] be compared with the name of Sangara the king of the Hittites of Karkemish, associated with Khanu of Samalla and others in the war against Shalmaneser? Perhaps the name of some Sangara remains among these old ruins."

Prof. SAYCE adds:

"Mr. Tomkins's identifications of the names of places both in Palestinê and in Northern Syria given by Thothmes III, at Karnak, will be published in the next volume of the *Records of the Past*. The names of the places in Palestine have been collated with the originals by Mr. Wilbour and myself, with the result that in some cases we have been able to make important corrections in the published list."

ARABIA.

PALMYRENE COSTUME.—M. Heuzey has made a study of the costume of the inhabitants of ancient Palmyra as shown by the sculptures. He finds, under the forms of the Greek style imposed on this sculpture, a curious persistence of Oriental costume. The tunic with sleeves, the broad trousers with ends stuck in boots after the Persian fashion, and the short sword, are all Oriental. So is the low cylindrical tiara often worn; so the Phœnician (purple?) vertical band on the tunic.—*Ami des Mon.*, 1891, No. 28, pp. 383–4.

PALESTINE.

REPORT OF THE PALESTINE EXPLORATION FUND.—The report presented at the meeting of July 21 contains mention of Herr Schick's successful endeavor to find the continuation of the rock-cut channel south of the Virgin's Fountain, and alludes in regretful terms to the theft (or, as the report calls it, "removal") of the famous Siloam inscription, which was cut out of the rock tunnel and carried away some time during last year. Through the active efforts of the Committee the fragments of the inscription, which was broken in removal, have been recovered; but the circumstance has aroused suspicion among the Turkish authorities, and several difficulties have consequently occurred in the work of exploration. Among the more important discoveries of the year are:—(1) An elaborate rock-cut tomb, and an ancient bath and cistern near Bethany. (2) Some fine mosaic work in three colors at the so-called "House of Caiaphas." (3) Another rock-hewn chapel with a Greek inscription at Silwân. (4) The springing of an arch in "Solomon's Stables" by Mr. Lees. The lower masonry and the part of the arch left are similar to Robinson's Arch, and the fragment of an arch near the south-east corner. A paper on this subject by Mr. Wrightson, C. E., a report with plans by Herr Schick, and a photograph of the arch by Mr. Lees, have been published in the Quarterly Statement.—*Academy*, Aug. 15.

PHœNICIA.

SIDON.—**PUBLICATION OF THE SARCOPHAGI.**—In anticipation of the *magnum opus* in which Hamdi Bey and Theodore Reinach are going to publish the famous sarcophagi of Sidon, M. Reinach has contributed to the *Gazette des Beaux-Arts* (Feb., 1891) and the *Revue des Études Grecques* (Oct.–Dec., 1891) two short papers in which a foretaste is given. The phototype plates show that the entire history of Greek sculpture from Pheidias to Skopas is represented by pieces of capital importance.

ASIA MINOR.

MR. RAMSAY'S LAST JOURNEY.—Mr. Ramsay's expedition to Asia Minor was cut short, almost at its beginning, by an attack of fever to which he has been subject ever since he had pernicious fever in Phrygia some years ago. He landed at Smyrna, and went by rail direct to Apameia-Kelainai, observing Kolossai and its district very carefully, in view of M. Bonnet's elaborate discussion of its topography in his edition of the Greek accounts of the apparition of the archangel Michael at Kolossai or at Chonai. He suggests a reconciliation between Herodotos and Strabo upon whom he had relied, and accepts Hamilton's solution. He believes that a great earthquake must have occurred at Kolossai in the early Byzantine period, and that the extraordinary natural phenomena accompanying the miracle at Chonai actually occurred.

In the neighborhood of Apameia-Kelainai he visited a remarkable early Phrygian rock-relief, which he found in 1883, but had never ventured to publish, as he was not absolutely confident about its character, and was unable to give a photograph. It is not easy to judge of the style of this relief as it is in very bad condition, and the most characteristic portions are lost. It represents a man in a car driving to the right; before and behind him are single horsemen, moving in the same direction. The heads of all three figures are gone, owing to breakage of the rock. The car is of very peculiar shape, and the wheel has six spokes; Prof. Ramsay sees in it the Phrygian car peculiar to the country, and used, *e. g.*, by Polemon in his semi-royal progresses between Laodikeia and Smyrna (*Philostr., Vit. Soph.*, i. 25). The style of this relief marks it as earlier than Greek influence. On the low hill immediately behind it, and quite close to it, is a large tumulus; and the connection of the relief with the tumulus is evident. Is the relief a heroized representation of the chief who was buried beneath the tumulus? or is the tumulus a landmark, and the relief a sort of milestone, on the road?

At Apameia and in the neighborhood a number of inscriptions were copied, and at last the problem of the rivers that rise beside the city and swell the Maiandros was solved. The difficulty, as in so many cases, arose from an error in mapping. We have all been depending on the map constructed by Prof. Hirschfeld in 1871; but on this map the main source of the river, in a deep but small marshy lake, and one of the two remarkable fountains that rise beside it, are entirely omitted. This source still bears the name Menderez Duden, *i. e.*, "the source where the Menderez reappears from its underground course." Prof. Hirschfeld wrongly makes the Orgas (which rises further south, and which he was the first to determine correctly) take a great bend round towards the hills, and thus actually identi-

fies it with this other source, ignoring the lake and one of the two springs. There are four ancient names attested by a coin and four branches of the river: *Therma*=modern Lidja; *Marsyas*, identified by Arundel, Hamilton and Hogarth; *Maiandros*=Menderez Duden; *Orgas* identified by Hirschfeld. The two fountains of the Maiandros, the Weeping and the Laughing, are still heard.

The next problem was the identification of the site of **LYSIAS**, which a text connects with a spring and a mountain, and therefrom determine the city. The performance of this task led through many adventures and discoveries. He found an inscription fixing Stektorion, and necessitating the interchange of the names Stektorion and Eucarpia in his *Cities and Bishoprics*; he crossed the mountains, 6,600 ft. in height, found a Greek inscription (containing five columns of writing, but inaccessible without 40 ft. of ladder) and many other novelties, and had the narrowest possible escape from a very dangerous accident. At last he stood on the site of Lysias. It lies on a mound in the Oinan Ova, and in 1886 he camped within a mile of it, and copied a *senatus consultum* which belongs to it. He had previously placed it on the road between Julia and Metropolis; this is so far correct, but the exact point on the road is near Metropolis, and not near Julia.

Lysias is a remarkable proof of the utter failure of the Græco-Roman civilization to plant itself deep in Phrygia. It was founded on the great eastern highway by the Seleucid kings as a bulwark of their power and a centre of Greek culture in a barbarian country. The Oiniatai, among whom it was planted, retained their name and their non-Greek character for many centuries (this we can see in the documents of the society of the Tekmoreioi in the third century after Christ); and at the present day all that remains of Lysias is a mound amid the cornfields, while the villages and the name of the Oiniatai remain much the same as they were before Lysias was founded.

From a topographical point of view the fixing of Lysias is of great importance; it gives us the fixed point which was hitherto wanting in the district, and the other names can be grouped round it. The only changes needed on the system proposed in the *Cities and Bishoprics* are that Sibidounda must contain in its territory the site near Bazar Agatch, and the name of the Euphorbeni must be applied to the valley of Metropolis much in the same way that the name Oiniatai belongs to the valley of Oinan. The latter was left an open possibility in *Cities and Bishoprics*.—W. M. RAMSAY, in *Athenæum*, Aug. 15.

* Mr. Ramsay wrote to the *Athenæum* of Sept. 5, substantially as follows:—Leaving Koma we went nearly directly east to Kara Bunar, about sixty miles distant, across the vast level Lycaonian plain, covered with marshes

and naturally fertile but with no water supply. The volcanic phenomena of Kara Bunar, which have been already described by Hamilton, are most wonderful; and one of the craters, which he did not see, afforded a proof that the identification of Hyde with Kara Bunar, proposed in the *Historical Geography of Asia Minor*, is correct. Five miles south-east from the village, and close to the road leading to Eregli, is a circular cup-shaped hole in the ground, about half a mile in diameter and 200 ft. in depth, with steep sides and a small lake in the bottom. In the centre of this lake rises a conical reddish-colored hill, about 500 ft. high, which is a very prominent object in the landscape, visible across the level plain from a great distance on all sides. The ground all around this spot is a mass of black ashes. There are several other conical hills, extending in a straight line from the Kara Dagħ on the south-west to the Karaja Dagħ, and thence to the Hassan Dagħ on the north-east. From Enderes, near Nikopolis, we struck down the Lykos valley to Koilon Hissar and Chaldere about twelve hours further down, considerably further than it has ever been explored before, when we were warned that further progress was extremely difficult, owing, apparently, to the forest, and struck away to the right over the hills to Niksar. There are abundant relics of old Neocæsarea. The castle—a very extensive building, which occupies a strong position on the ridge to the north of the town—is still standing in shell; the main street of the modern town is planted against the outer wall of defence; and there are ruins, arches, conduits, *etc.*, in every direction. Yet little seems to be as early as the Roman period. At OMALA, near the river, we copied several inscriptions, among them two fragmentary milestones. In the open valley beyond, about an hour and a half above Tokat are the ruins of *Comana Pontica*. The neighborhood is known as Gumenek. Two or three inscriptions, enough to identify the site, are built into the modern bridge which spans the Iris close to the ancient; but the ruins have never been exploited for stones.

The rich, grassy Kaz Ova (Dazimonitis), down which the Iris runs, seems to have contained villages of the Byzantine period, but no town of importance until Turkhal is reached. In various places upon the castle rock and round about it tombs have been cut and epitaphs inscribed, some now obliterated, but others still legible; the castle itself is, perhaps, partly Byzantine, and there are many fragments of capitals, cornices, and the like built into the modern town, which attest an ancient town of some importance, doubtless Iborā, which Mr. Ramsay places here. No trace of a Roman road seems to remain in the lower valley of the Iris. At last, at Kavsa, we came on signs of a Roman road: three milestones, two in perfect condition, have been unearthed near that village; but both the direction in which they were found and the number XVI upon them are

incompatible with their belonging to any road from Amaseia, which is about twenty-five English miles away. A *caput viæ* must, therefore, be sought sixteen Roman miles from Kavsa. The road by which the stones were found now leads from Vezir Keupru, distant about fifteen English miles; this is an important road centre at the present time and there accordingly must have been the important Roman city from which distances were reckoned to Amisos which conjecture was Andrapa-Neoclaudiopolis at Iskelib. Nearer to Amisos we found another stone of a late period at Kawak, where other late remains exist; and possibly another exists near Kavsa, which we failed to find. Hamilton found remains at Kavsa long ago; there are Greek inscriptions built into the mosques, and a very old bath. We succeeded in placing **FAUSTINOPOLIS** at Ulu-kishla-Sejah-ed-din, and found the fortress Loulon on a peak about three or four miles to the east; thus confirming the account given in the *Historical Geography* of the relation between these two places, one being the Roman centre, and the other the Byzantine centre which was substituted for it.

Coming through the Cilician Gates, we re-examined the inscriptions on the rocks, which have been long known, and are published in the *Corpus Inscr. Lat.* The style of the older copies may be guessed from one or two specimens. The word **OPOI**, "boundaries," appears as "S.P.Q.R."; a milestone of Caracalla has been transformed into an unintelligible fragment relating to Hadrian; and the interesting phrase *viam et pontes a Pylis usque ad Alexandream ab integro restituit* has been lost entirely in one case, and on another milestone has been made conjecturally into *via et pontes a Pylis usque Alexandream in Pieria per millia*. One inscription in the Gates was particularly charming:—**OPOI·KIAIKΩN**. It dates from the time of Caracalla; but it confirms the natural conjecture that the present boundary of the Adana vilayet has been the limit of Kilikia from time immemorial.

JOURNEY OF HOGARTH AND MUNRO.—Messrs. Hogarth and Munro on arriving at Mersina on June 24 to join Professor Ramsay found that he had been compelled to abandon his trip and return to England. They started, therefore, alone, and their first object was to obtain information as to the course of and distances on the great Roman road from Ephesus to the east, upon which so much light had been thrown already by Professor Sterrett's discoveries in 1884. They found almost at the outset a group of milestones, half buried, and obviously *in situ*, twenty-seven minutes south of **KEMER**. On five of these stones was the numeral 149, in three cases (stones of Septimius Severus, Gordian, and possibly Diocletian) expressed both in Greek and Latin characters. A sixth stone was probably a fragment of one of the five already mentioned. Two were twice inscribed, one perhaps thrice, and thus this group represents at least seven restorations of the road. These stones, are *in situ*, on the edge of the low embankment

which can be clearly seen running down the valley beside the modern track, and represents the ancient road. The 149th mile was, therefore, about two miles south of Kemer, where accordingly was the 151st station, represented by a stone of Septimius Severus copied by them in the cemetery. At Kemer one arch of a Roman bridge over the Saros still remains. Continuing southwards, they found groups *in situ* one and two miles further on—the 148th and 147th. A mile further is Yalak, where Sterrett found three stones. From that point they lost the road for a time owing to misdirection, but hit it again in the pass over the watershed of the Pyramus. One mile beyond Kekli Oghlu they found the 136th group *in situ*, and are thus able to show that Sterrett's stones at the village itself are also *in situ* at the 137th mile. For some distance further they could trace the road easily, but could not find any milestones. At this point the stones are made of coarse marble which weathers badly, and thus no numerals can be made out on the group at Mehemet Brikeui. This group stands in a small cemetery by the roadside, but there can be no doubt that the position of the group has determined the position of the cemetery. These stones, therefore, are *in situ*, probably at the 131st mile. In Gyuksun various stones have been collected in the cemeteries; among them is a representative of the 125th group, which must have stood near or in Cocussus. The 118th was below Kaulü Kavak and formed the nucleus of the cemetery, which now contains over twenty stones. Between Gyuksun and Kaulü Kavak we found other groups, one, probably, the 123rd, another the 121st, and another the 119th. An hour beyond Kaulü Kavak we found the 115th group, not seen by Sterrett, as the ancient and modern roads do not coincide here so exactly as is usually the case. One mile further we found the 114th group and then the 113th. From this point to Yarpuz (Arabissos) the road traverses a wild hilly region, and, though in some places we could see the old road winding up the gullies, the milestone groups seem to have disappeared. Sterrett found the 100th stone a short distance west of Yarpuz. We found stones again east of the latter *in situ*, probably at the 95th and 91st stations. In the cemetery of Isghin are two stones, probably from the 90th group. From Yarpuz eastwards the stones have borne either no numeral or one now utterly illegible. Altogether they have either discovered or greatly added to previous copies of forty milestones on this road.

In Albistan they were permitted to take copies and photographs of the "Hittite" monument discovered by the Rev. Henry Mardin at Isghin, whence it was recently removed. This monument proves to be of great importance. It is a slightly tapering obelisk, semicircular at the top, measuring 8 ft. 2 in. by 1 ft. 7 in. by 10 in. The stone is broken below, but the inscription is probably complete except for a band round the lower half of the stone, where it has been entirely worn away. The writing, in

the raised character, occupies no less than sixty-seven lines, and covered all four sides of the obelisk. The lines are divided by narrow bands in relief. The symbols are well cut, and the inscription bears a general resemblance in style and character to those at Gurun. The authorities, in whose custody the stone now is, contemplate sending it to the museum at Constantinople. The tale of the finds so far is completed by about thirty Greek inscriptions.

A letter from MM. Hogarth and Munro from Sivas (Aug. 13), published in the *Athenæum* of Sept. 12, describes their journey from Marash to Sivas. Near Marash, in addition to some Greek inscriptions of Germaniceia, they found a new Hittite fragment in the possession of the Catholic Armenian church. It is a piece of a black basaltic statue covered with symbols in relief; the beginning and a considerable part of two lines remain, but in all probability these represent only a small portion of the original inscription. They purchased a Hittite seal in perfect condition. Both objects are said to come from a locality not far from Marash.

They followed the direct pass leading from Marash through the Taurus to Albistan. Traces of an ancient road are discernible in the narrowest part of the pass. But the ancient road was a compromise between the two alternative modern routes—that by Qeitun and the more direct but, owing to difficulties, not less lengthy path which strikes the left bank of the Jihan twelve hours from Albistan. They were able only in part to find, by going up the Sogutlu Irmak from Albistan, the continuation of the great eastern road, which they traced from near Komana to a point beyond Arabissos. They confirmed Professor Ramsay's conjecture (*Geog. of A. M.*, p. 273), that the ancient road went up the Sogutlu Irmak, by finding milestones at Demirjilik, a village on the left bank of the stream, and the ruins of a bridge a mile and a half further, by which the road crossed to the right bank. They entirely failed to trace it further. The scanty remains of an ancient site here, called Giaour Oren, may represent Osdara. On the Sivas frontier at Arslan Tash they were detained.

They were able to photograph the two lions, discovered by Von Moltke, which stand in a little graveyard by the roadside. From their position side by side, they appear to be *in situ*; the little collection of graves has grown up round them; and they stand, as they stood formerly, at the entrance of a palace long ago perished. Two miles further north are other relics, possibly of the same buildings. In the wall of a farm is built a small lion of black basalt, and, hard by (nearly buried in the mud), they rediscovered an inscribed stone first noticed some years ago by Mr. Hubbard, American missionary at Sivas. It is the lower half of a draped figure of uncertain sex, round whose left side runs a Hittite inscription of four lines, the last being double the breadth of the other three. The symbols are incised

and represent much conventionalized forms of the usual types in relief. No copy of this has been published, and the excellent state in which most of the symbols are will make this long text a very valuable addition to the small number of incised Hittite inscriptions now known.

On leaving Sivas they ascended the course of the Halys, following, in the main, the road constructed six years ago and intended to connect Sivas with Erzinjian. Eighteen miles from Sivas is a village, Kemis, obviously the ancient **KAMISA**, whose importance has passed to the village opposite, Kotch Hissar, and relics only of late Christian times have remained on the older site. The next station of importance, **ZARA**, has preserved its name, and is still a place of some size and the centre of a district. Thence the Roman road continued to ascend the Halys for some miles further before crossing by an easy pass into the valley of the Lykos and descending the Ouzoun Chai to Ashkhar, and so to Nikopolis (Pürkh). They found an interesting inscription at a village upon the road, recording the erection of a church by Justinian. The main object being to identify satisfactorily the site of **NIKOPOLIS**, they made constant inquiry for ruins of importance, and found that all rumors related to Pürkh, an Armenian village three miles distant from Enderes, an important centre on the new road. Below the village where stones were excavated constantly was the northern wall of a large city, whose western and eastern walls could be traced in long embankments of rubble and stones running up to the modern village which evidently occupies the southern end of the site. The village is full of remains, Roman and Byzantine; one of the inscriptions found here was in Latin, the rest in Greek. None contained the name of the city, but at Ashkhar, two hours to the south, where antiquities were reported, a milestone, the seventh from the *caput viæ*, is built into a fence, and this *caput viæ* is, of course, Nikopolis. It stood on the road Nikopolis—Zara—Sebasteia. About one mile and a half south of Pürkh is a smaller site at Eskisheher (= "old town"), possessing a strong natural citadel, on which are an ancient cistern and traces of walls. Comparing this small but strong position with the exposed situation upon a rich plateau which the site near Pürkh occupies, we were led to infer that Pompey's Nikopolis was probably at Eskisheher, and, like many other towns in Asia Minor, was moved to the lower and more convenient site when the security of the district became assured.

DISCOVERIES BY THE FRENCH SCHOOL.—MM. Legrand and Chamonard, of the French School of Athens, have discovered some fifty inedited inscriptions and several statues in the cities of Stratonikeia, Lagina, Notion, and Dinair. An inscription at *Notion* is dated in the consulate of Berenicianus Alexander, in 133 of the Christian era, and contains a list of magistrates, priests, and members of religious associations. Another belonging to *Lagina*

bears a dedication in honor of M. Cocceius Nerva, and another a catalogue of the priests of Hekate. At *Dinair*, the ancient Apameia, a bilingual inscription in Greek and Latin relates to the anniversary festivities of the birth of a Roman emperor; as also the base of a statue of Sossia Polla, daughter of Sosius Senecio, and wife of Pompeius Falco, proconsul of Asia.—*Athenæum*, Aug. 15.

AUSTRIAN EXPLORATION.—The annual subvention of 5000 florins given by Prince Liechtenstein to the Academy of Vienna for archæologic exploration in Asia Minor during five years, was granted during 1891 to MM. Wilhelm and Heberdey. They explored Kilikia Tracheia with great success and discovered a dozen unknown cities and several hundred inscriptions, some of which are of great importance philologically and historically. One fragment of a royal letter, and others dating from the second century B. C., are amongst the treasures they bring home.—*Revue Arch.*, 1892, I, p. 118; *Athen.*, Jan. 2.

PUBLICATION AND DISCOVERY OF INSCRIPTIONS.—M. Kontoleon has published inscriptions of Asia Minor in the Athenian *Mittheilungen* (1891, p. 330: see *Summary*), in the *Revue des études grecques* (1891, p. 297: see *Summary*) and in a special pamphlet. M. Cousin has published some inscriptions in the *Bulletin de corr. hellén.*, 1891, pp. 418–30.

Mess. Legrand and Chamonard, during their trip in the summer of 1891, discovered the following inscriptions. At *Notion*, a list of magistrates, priests and members of religious associations; at *Lagina*, a list of priests of Hekate, and a dedication in honor of M. Cocceius Nerva; at *Apameia* in Phrygia, a bilingual inscription relating to the anniversary of the birth of the emperor. M. Huart found at *Ikonion* two Latin dedications to Caracalla and Lucius Verus, and a Greek inscription which mentions a λογιστής. Two inscriptions of *Knidos* have been copied by Benndorf and Patsch in the collection of Prince Liechtenstein at Vienna. One of them mentions the demiurges Timakles and Timasikrates. M. Judeich has published in the Athenian *Mittheil.* (1891, p. 338) two archaic epitaphs of *Erythrai* and *Klazomenai*, and on the latter site was discovered an important inscription consisting of a poem placed in the mouth of the Erythraean sybil in support of the claim of Erythrai as the birth-place of the sibyl as against those of Marpeessos.—*Revue Arch.*, 1892, I, Jan.–Feb.

RESTORATION OF MOSQUES.—The Sultan has, at a cost of 2,000*l.*, repaired the ancient Seljukian Alaeddin mosque at Konieh. It may be noted that extensive repairs have for many years been made of mosques and ancient buildings throughout Turkey, partly at the expense of the Civil List and partly from the funds of the Commission of the Evkaf, an administration of the nature of our Ecclesiastical Commission. Many new mosques and schools are built in the villages founded by the immigrants

and exiles who have poured in from neighboring countries. To these structures the Sultan has been a large contributor.—*Athenæum*, Nov. 21.

HITTITES AND PELASGIANS.—Dr. de Cara has published a paper which he read before the recent Oriental Congress under the title *Della Identità degli Hethei e de' Pelasgi dimostrata per la Ceramica pre-fenicia e pre-ellenica* (Rome : Befani). Like all the author's other works, it is distinguished by an acquaintance with the most recent results of oriental and archæological research, and the views expressed in it are novel and suggestive. He seeks to show that the Pelasgians of Greek tradition represent the Hittites of Asia Minor and Syria, and that the culture of Mykenai had its ultimate origin in the Hittite empire whose significance is but just beginning to be understood.—*Athenæum*, Dec. 5.

BILINGUAL HITTITE SEAL-INSRIPTION.—The Ashmolean Museum at Oxford recently acquired a seal which has been noticed by Prof. Sayce (*Acad.*, Jan. 9) and Mr. Tyler (*Acad.*, Jan. 23). On the seal are two figures face to face. The Hittite may be recognized by the resemblance of his dress to that of Tarkutimme on the other well-known seal. In the perpendicular column at the back of the Hittite are four Hittite symbols. The other figure, on the left, which is that of a deity, has at its back three perpendicular columns of Babylonian cuneiform characters. It becomes at once clear, from their relative length, that the Babylonian and Hittite inscriptions do not fully correspond. The Babylonian inscription is thus translated by Mr. Pinches, who places the date of the seal at about 2000 B. C. "Indilimma (less probably *Indisima*), son of Sin-irdamu (Prof. Sayce gives *Serdamu*), servant (or "worshipper") of the goddess Ishchara."

At the top of the Hittite column is the head of some animal, probably some kind of goat: below it are joined two parallel lines. This probably represents the name *Indilimma*. Then comes the character with divergent legs and turned-up toes which Mr. Tyler believes to have the concrete sense of "man," hence worshipper. Beneath is the equilateral triangle, the symbol of some divinity which it might be rash to identify with Ishchara.

AMORGOS.—Attention should be called to the large marble head published by Dr. Wolters in the Athenian *Mittheilungen* (1891, p. 46) of which a summary has already been given. It belongs to the class of so-called Carian idols and is remarkable for its brilliant polychromy which appears to represent tattooing.—*Rev. Arch.*, 1891, I, p. 112.

DARA.—DISCOVERY OF A MAGNIFICENT FRIEZE OF GREEK SCULPTURE.—Hamdy Bey writes to a friend in America that late in the autumn he discovered at Dara a sculptured frieze forty metres in length, belonging to a Greek temple. It was in good preservation, and partly retained its coloring. The style is of the best Greek developed art, and Hamdy Bey regards it as

a discovery equal in importance to that of the Sidon sarcophagi. No notice of this discovery has yet, to our knowledge, appeared in print.

KOS.—Mess. Paton and Hicks have published in a fine volume a *Corpus of The Inscriptions of Cos*. There are about 500, with ample Commentary, *excursus*, etc. It is the best local corpus hitherto published in the domain of Greek epigraphy (*Rev. Arch.*, 1892, 1, p. 111). See Review by Prof. J. H. Wright, on pp. 460–64.

LESBOS.—**DISCOVERIES AT MYTILENE.**—The vice-consul of France announces the discovery of a marble statue representing a reclining Dionysos (?), a triple Hekate, a bearded head, and an inscription, all in the midst of fragmentary marble columns.—*Revue Arch.*, 1892, 1, p. 111.

LYKIA.—**NAMES ON THE XANTHIAN STELE.**—In a letter to the director of the *Muséon* (1891, p. 270), M. Imbert gives a summary of the results which he and MM. Deecke and Arkwright have reached with regard to the proper names on the stele of Xanthos. The events related by the Xanthian scribe gravitate around the year 412 B. C. Dr. Deecke has discovered there *Pharnabazes* and *Tissaphernes*, Mr. Arkwright *Hieramenes*, M. Imbert *Amorges* and *Hydarnes*. Mr. Arkwright, basing himself upon the law of vowel harmony which apparently rules Lycian phonetics, concludes that the Lycian approaches the Altaic tongues and is certainly not Arian.—*Revue Arch.*, 1892, 1, p. 128.

MAGNESIA.—**THE TEMPLE OF ARTEMIS.**—At Magnesia, on the Maian-dros, MM. Humann, Hiller, and Kern have now made out the sacred enclosure of the temple of Artemis Leukophryne, and brought to view all the remains of the temple itself. Portions of the frieze, much damaged, were recovered, and in digging out the theatre and the remains of a portico many inscriptions were found.

The excavations of the German School at Magnesia under the direction of Dr. Kern, have now reached the agora, where, besides other antiquities, two statues of Athena have been found. One wears the *chiton poderes*, fastened at the shoulders and arms by brooches and folded crosswise on the breast. In front of the *chiton* is a representation in relief of the emblem of Athena, viz., a Medusa head, with its serpents touching the breasts and reaching up the neck. The statue is of natural height, but of the arms only detached fragments were found. The second statue is 1½ metres high, and bears aloft in one hand a spear and in the other a shield. Both statues are headless. Other discoveries include two colossal statues of women, about 2½ metres high, clothed in long garments reaching in folds to the ground, with a mantle covering the head. They are supposed to represent the city of Magnesia. Of the heads only one was found on the ground, and it is probable the other will be found close by. Two other statues represent

two Amazons on horseback, with their husbands holding the reins. At the same time many inscriptions were found.

The Sultan has granted a firman for new excavations at Magnesia, and Professor Kekulé, of the Archæological Museum of Berlin, has gone, in company with Hamdy Bey, to the site in order to determine on the plan of operations. Professor Kekulé will afterwards proceed to Miletos.—*Athenæum*, Nov. 28.

RHODOS.—Herr Brueckner has studied in the museum of the Evangelical School at Smyrna (see summary of *Athen. Mittheil.*, 1891, p. 151) a large archaic terracotta head from Rhodos which crowns a vase. It wears a cap with traces of applied decoration, apparently hunting trophies.—*Revue Arch.*, 1892, I, p. 112.

SMYRNA.—Various discoveries have been made in this neighborhood. At a point where there are columns still remaining an inscription was found showing that here stood the temple of Aphrodite Stratoniceis (Tac., *Ann.* III. 63). It reads: Τέμενος ἱερὸν Ἀφροδίτης Στρατονικίδος, ἐξ οὗ ἡ δεκάτη καὶ τὸ παραπεπραμένον ἀπο τῶν πλέθρων κατατάσσει[τα] εἰς τ[ὰς] ἐ[ρ]χ[ὰς] προσόδους]. Here also has been found a relief of a Seilenos and a bacchante.

In Smyrna itself, near the Konak, a mosaic pavement and two headless statues were found. The Smyrniot collector Mitthos calls attention to a vase bearing a bust of Dionysos and the inscription: Διόνυσος πολυφύμητε, κλυμενῶν τὴν αἶγὰ μου φύλασε (sic) καὶ τὴν κυτέλην.

At Dermen-Tepe, near the city, there came to light a fine sepulchral relief, representing a woman seated between two female servants.—*Rev. Arch.*, 1892, I, pp. 122-3.

EUROPE.

GREECE.

REGULATIONS CONCERNING EXCAVATIONS.—In a circular dated June 3, 1891, M. Kabbadias establishes the new conditions under which private persons may excavate on their own land. No investigation can be undertaken without the permission of the Ephory; and permitted excavations must be superintended by an Ephor who alone shall have the right to fix the number of workmen, to extract the finds, etc. The objects discovered shall be sent to Athens, where their value shall be determined by a committee formed of the Ephor-General, the owner, and a third person. In case, for example, the estimate amounts to 10,000 drachmas, the National Museum may have as its share 5,000 drachmas worth of objects: in case it wishes to take 10,000 drachmas worth or more, it shall pay the owner whatever is in excess of 5,000 drachmas.—*Revue Arch.*, 1891, I, 76.

EXCAVATIONS BY THE AMERICAN SCHOOL.—The excavations of the American School during the present season have been carried on at (1) Sikyon ; (2) Eretria ; (3) Argos (near) ; (4) Sparta ; and (5) Phlius. Details concerning each of these will be found under their respective headings.

Text of Government act.—The following is a translation of the act by which the Greek Government grants to the American School the permission to excavate in Lakonika.

Athens, 20 January, 1892.

To the Director of the American School, Charles Waldstein, Esq. :

Having under consideration your letter of the 4/16 January, communicated to us by the Ministry of Foreign Affairs, and the petition No. 9453 of the Ephor-General, and being desirous of assisting your School in its archæological work among us, we hereby grant you permission to carry on, in the name of said School, excavations in the province of Laconia and particularly in the vicinity of ancient Sparta and of Amyclæ. We grant you this permission under the following conditions :

(1) That you carry on your excavations in land belonging to the State, according to a previous understanding with the Ephor-General of Antiquities and with the Nomarch of Laconia. In case you make experimental excavations in private property, you will receive permission from the owner thereof in accordance with the statutes of our archæological law. But, if in the course of these experimental researches you should arrive at results such as to warrant your thinking it necessary to excavate private property, you will specify to us the places to be excavated, in order that we may take our own measures for expropriation at the expense of your School and under the conditions of the treaty made with the French Government relative to the excavations at Delphi.

(2) The permission for these excavations is granted to you for a period of seven years reckoned from to-day.

(3) By virtue of this permission you are allowed to take moulds or casts of the antiquities discovered.

(4) You are further allowed to be the first to publish the results of the excavations and of the discoveries thereby made. This permission will hold good only for a period of five years from the date of the discovery of each antique.

(5) So long as the excavations are carried out under your own enlightened and experienced direction, the Ephoralty-General will confine itself to surveillance by suitable officials and to oversight of the work. If, however, at some future time there should be any personal change in the direction of the excavations, the Ephoralty-General reserves to itself the right which it holds, of participating, if necessary, in the direction of the

excavations, determining entirely the manner of unearthing the monuments, the way of arranging the ancient stones in the excavated region, and the place in which the earth turned up in the course of excavation shall be put.

We trust that your School will have an important career in its archaeological work in Laconia, and that under your enlightened and experienced direction, these excavations may lead to results which shall further the interests of archæological science.

(L. S.)

(Signed)

The Minister

ACHILLES GHEROKOSTOPOULOS.

PETRIE AND TORR ON EGYPT AND PREHISTORIC GREECE.—In an article in the *Journal of Hellenic Studies* (*the Egyptian bases of Greek history*) which is summarised on p. 361, and since then in his volume *Illahun, Kahun and Gurob*, Mr. Petrie has set forth in detail what he regards as the results of his excavations in Egypt as affecting our knowledge of the origins of Greece. It would appear as if his statements were being quite generally accepted, although they push back the origin of early Greek culture much further than was thought possible—to a period about 2000 B. C.

Almost every one of Mr. Petrie's conclusions have been strongly attacked by Mr. Cecil Torr in the *Classical Review* for March 1892, where he undertakes to show that the basis upon which Mr. Petrie erects his theories is unsubstantial and unreal. The details of the question will be discussed in a later issue.

GREEK PALÆOGRAPHY.—The forthcoming part of the publications of the Palæographical Society is devoted in a large degree to the illustration of ancient Greek writing, ten plates being selected from papyri ranging from the third or fourth century B. C. to the third century A. D. Among them are the "Imprecation of Osiris-Apis by Artemisia," written in the style of epigraphic monuments, with the transitional form of *sigma* and the double point or colon for punctuation, preserved at Vienna in the Hofbibliothek; a money-bill, dated in the thirty-first year of Ptolemy Philadelphos, 253 or 254 B. C., and written in a cursive hand; a receipt for taxes in Thebes, dated in the thirteenth year of Ptolemy Philopator, 210 or 211 B. C., in cursive uncials; a Greek fragment dated in the seventh year of Domitian, 88 A. D., relating to land in the Arsinoite nome in Egypt, written in uncials of a type more nearly approaching the uncial writing of early vellum mss. than is to be found in any other extant document which can be attributed to so early a period; and several other documents preserved in the British Museum, which has recently acquired a considerable amount of Greek papyri from Egypt, that have opportunely found an exponent in Mr. F. G. Kenyon.—*Athenæum*, Jan. 23.

GREEK AND ROMAN ICONOGRAPHY.—The publishing house of Bruckmann lately announced the publication of a monumental work on Greek and Roman Iconography, the text of which will be written by MM. Brunn and P. Arndt. It is to consist of from 80 to 100 numbers, each containing ten plates, and is to be on the same pattern as the great folio publication of Brunn on Greek and Roman sculpture.

MANUAL OF GREEK ARCHÆOLOGY.—Mr. Murray, of the British Museum, has issued a volume on Greek Archæology which will be exceedingly welcome. A review of it will appear in a future number. In the meantime, it is so able and compact a treatise as to make it evident that it will become indispensable to all students of Greek art and antiquities.

GUIDE TO GREECE.—The second volume of the revised *Guide en Grèce* of Isambert has appeared. It includes Continental Greece, except Athens, and is edited by M. Haussoullier with the help of Mess. Fougères (Delos, Peloponnesos, Pindos), Monceaux (Thessaly), Lechat (Ionian Islands) and Battifol (Epeiros). It is accompanied by 17 maps and 22 plans.

ALLEGORY IN VASE-PAINTING.—M. Pottier has published in the *Monuments Grecs* (1891, pls. 9, 10) an article on a vase in the Louvre in which he makes a careful study of the personifications and allegories in the painted vases of good Attic style. It includes a list of such vases with allegorical figures. S. Reinach remarks, in his *Chronique* (*Rev. Arch.*, 1892, I, p. 73), that this piece of work is one of the most remarkable instances of what our science can accomplish when the knowledge of details is made fruitful by a general idea.

MYTHOLOGY.—Professor DYER has published a charming and enthusiastic volume entitled *Studies of the gods in Greece at certain sanctuaries recently excavated*.

MUSICAL NOTATION.—In the inscription of Tralleis published by Mr. Ramsay (*Bull.*, 1883, p. 277) Mr. Crusius notes the presence of a musical notation engraved between the lines. It is also announced that Wessely has discovered in the Renier papyri a chorus of Orestes provided with its musical notation (*Philologus*, 1891, p. 163).—*Revue Arch.*, 1892, I, p. 127.

PHOTOGRAPHS.—The German Institute is forming, at Athens and at Rome, collections of photographic negatives, copies from which can be obtained by archæologists. The collection at Athens numbered already twelve hundred in 1891. The catalogue was published in the *Archäolog. Anzeiger*, 1891, p. 74; cf. p. 65.

NEW MUSEUMS.—Two new museums have been founded, one at Tanagra, the other, a small one, at Livadia.—*Athenæum*, Jan. 2.

SHIFTING OF ARCHÆOLOGICAL COLLECTIONS.—The last remains of the Trojan collections of Schliemann have lately been packed in cases, under the supervision of the General Ephorate of Antiquities, for transmission to

Berlin, in accordance with the directions of the deceased. The Mycenæan collection and the Egyptian antiquities—both of which have been kept in the Polytechnic—are to be transferred to the Patissia Central Museum. Two rooms have been prepared there for their reception; one is to be decorated in the Mycenæan style, the other in the Egyptian, the whole being done from the plans of a German architect.—*Athenæum*, Oct. 10.

AKRAIPHIA.—TEMPLE OF APOLLON PTOOS.—M. Holleaux dug a little during the autumn of 1891 on the site of the temple of Apollon Ptoos. He found two bronze statuettes representing a nude youth and a child, many bronzes decorated with reliefs, and a small marble female head.—*Revue Arch.*, 1892, I, p. 103.

ARGOS.—EXCAVATION OF THE THEATRE.—The Greek Director-General of Antiquities has begun to excavate the theatre of Argos, and has already cleared out a portion of the *scena* and some of the seats. After the discovery of the eighteen new steps cut in the rock of the sloping Larissa, the last of which is in the form of separate seats like thrones for the magistrates, the orchestra itself has been brought to light. Behind the orchestra was found the *scena* of Roman construction, composed of three walls built out of materials belonging to more ancient times. The remains of the older Hellenic *scena*, constructed of *poros* stone, were also found. To the south of the theatre are now to be seen the walls belonging to the *parodos*, and a little beyond the aqueduct which fed the theatre. Other recent discoveries, besides these various walls, include fragments of marble statues, a stone pedestal, some terracotta weights, morsels of painted vases, more than twenty coins of different periods, and lastly a Roman inscription.—*Athenæum*, Sept. 26.

ARGOS (near).—AMERICAN EXCAVATIONS AT THE HERAION.—In 1854 MM. Rhangabé and Bursian had made tentative excavations on the site of the second temple, digging trenches on the north and east sides of the temple, but they appear not to have gone lower than the tops of the extant walls, so that their work led to no discoveries and all traces of it have disappeared.

The temples in the sacred enclosure of the Heraion are situated on the hill Euboia about five miles from Argos and were the main sanctuary of the entire Argive district from prehistoric times. Excavations were undertaken here during the winter of 1892 and continued until the first week in April, yielding results that already promise to make this one of the most important excavations undertaken in Greece. The buildings investigated were: (1) the early temple burned in 423 B. C.; (2) the second temple erected by Eupolemos between 420 and 416 B. C.; (3) a third temple; (4) a large stoa; (5) some aqueducts.

The earliest temple, erected on the slope of the hill, was only cursorily investigated at the beginning of the excavations. It was found to be on a platform supported by polygonal walls. Some trenches having been dug the ancient polygonal pavement was reached, and thick layers of burnt wood were found, telling the history of the destruction of the temple.

Work was soon concentrated, however, on *the second temple*, the site of which was cleared almost completely. It is known to have been one of the most beautiful temples in Greece, built by Eupolemos of Argos, and decorated under the supervision of the great sculptor Polykleitos the rival and contemporary of Pheidias. The foundation-walls were all laid bare to a depth of four to five metres below the surface, and were cleared all around to a distance of another four or five metres. A great many pieces of well-preserved architectural decoration were found, sufficient to make a restoration of the temple possible. They bear a certain resemblance to the decoration of the *tholos* at Epidaurus, now thought to have been the work of Polykleitos the younger, but this resemblance is rather that of a prototype. The closest connection is with the Erechtheion at Athens. Several pieces of sculpture were found. The most important is a life-size marble head of Hera in perfect preservation, found near the west end of the temple, and belonging evidently to its pedimental sculptures. It is of the greatest importance for the knowledge of Greek sculpture, for it is a work of the fifth century, probably from the hand of Polykleitos, and the only well-preserved head of the greatest period of Greek sculpture. Other small fragments of sculpture seemed to belong to pedimental sculptures. In the interior foundations of the temple was found a large piece of a metope with the torso of a warrior fighting, in perfect preservation, by the hand or school of Polykleitos. There are also two well-preserved smaller marble heads one certainly belonging to a metope.

Below the temples there was found to be a terrace of considerable extent upon which a number of buildings had been erected. Remains were found of a large stoa, of a third temple, and of extensive aqueducts, the excavation of which, with that of the first temple, was reserved until next season. Even the second temple was not quite finished; and the southern declivity with its stairs was left untouched.

A discovery of the greatest importance was made between the two temples. At the west end of the second temple, the hill was dug away to a depth of over thirty feet, carrying away substantially the side of the hill, and resulting in the uncovering of a thick black stratum of earth within which was found an immense number of objects belonging to the primitive period of Argive art which Dr. Waldstein considers as hardly inferior in interest—if at all—to Dr. Schliemann's discoveries at Tiryns and Mykenai. In his opinion, none of them are of later date than the sixth century B. C.

In his report to the Institute, which will soon appear in the Institute's Annual Report, Dr. Waldstein gives a list of a selection from this collection which has been sent to the Museum at Athens. Though this list includes only the smaller part of the find, it contains many hundred pieces: terracotta figurines, vases, marble heads, bronze statuettes and animals, objects and heads in bronze, gold, silver, ivory, bone, amber, *etc.* Two are Egyptian in style and have hieroglyphs. It is probable that the study of this collection of objects will be extremely instructive for the period of Greek art between the Homeric age and the sixth century, for there appears to be among them a large number of figured pieces. Such are, for example, thirty-nine stone heads.

Messrs. Brownson, Fox, De Cou and Newhall assisted Dr. Waldstein efficiently in the excavations.

ATHENS.—EXCAVATIONS AT THE DIPYLON.—Amongst the most important results of the latest excavations at the Dipylon at Athens is the discovery of a sanctuary in the midst of the necropolis, a position hitherto unprecedented. There is also an inscription of forty-two lines belonging to the first century B. C., which is entirely preserved. In it mention is made of the worship of Artemis Soteira, which it was not hitherto supposed had existed in Attika, and there occur in it the names of two archons now known to us for the first time. Professor Mylonas, who is the discoverer of this inscription, will publish it immediately in the *Ephemeris Archaeologiké*, together with some others relating to the Dionysiac actors, one of whom belongs to the fourth century B. C.

Professor Mylonas is preparing a comprehensive work upon the results of the excavations at the Dipylon, in which he follows their course from their commencement in 1862 till the present day. They were begun under the auspices of the Italian Government, and were continued by the Greek Archæological Society.—*Athenæum*, Jan. 2.

SEARCH FOR BUILDINGS IN THE AGORA.—The German Institute commenced, at the close of last January, investigations for the purpose of ascertaining whether any of the buildings which are described by Pausanias in the Agora could be identified. They should be sought for west of the so-called Theseion and north of the new railway at a point where Pausanias placed the Stoa Basileios. But, as the owner of this piece of land did not allow excavations to be made, a beginning had to be made elsewhere. On the right of the modern road leading from the Areopagos and the Pnyx to the Acropolis is an ancient water-conduit carried through the rock which evidently carried drinking-water in the neighborhood of the Areopagos to the old market-place. It was here that the excavations were started. The object was to determine, on the one side, the upper section and starting point of the conduit, and, on the other, the reservoir or

running fountain at which it ended. As Pausanias speaks of a running fountain in or near the market-place, the famous Enneakrounos, it seemed possible to determine more accurately the position of this largest and most important fountain of the city. The first part of the problem was partially solved. On the left side of the modern road the upper continuation of the rock-cut conduit was found and cleared. It consists of a canal constructed of large slabs of calcareous stone and covered with the same. Its direction shows it to have come from the upper Ilisos valley, and to have skirted the south declivity of the Akropolis. A rock-cut canal under the "Hofgarten" which still carries water must be joined to this same system. The construction of the newly-discovered part proves it to be a Greek and not a Roman work, and its size shows it to have been the bearer of the main supply of fresh water to the city.

Excavations at the terminus of the conduit, between the Pnyx and the Areopagos, have not shown any traces of the reservoir-fountain. A street was, however, brought to light with a retaining wall of large stones, which led from the region of the old market-place up to the Akropolis. Its width of about 1.20 met. is about right for such a purpose. North of the road was a Roman or Byzantine cistern with a crude brick conduit, and under this a Greek or Roman structure with a marble-mosaic pavement, within which were found three Roman marble heads and a statuette of Hekate. There is still hope of finding the fountain, however, for excavations have not yet reached the ancient level. At all events, the discovery of the road and the conduit mark considerable progress in our topographic knowledge of the Agora.—*Athen. Mittheil.*, 1891, pp. 443-45.

ADDITIONS TO THE CENTRAL MUSEUM.—The *Deltion* reports the following additions to the Central Museum from June to Sept., 1891. Sculptures found in prolonging the railway from Athens to Peiræus: the base of Bryaxis; a headless statue of Nikê Apteros, 1.10 met. high, an excellent work of the third century; a votive relief representing Amphiaraos and Hygieia. From Melos, a colossal statue of the type of the Apollon of Tenea; from Thessaly, a sepulchral relief of a standing male figure holding a lyre. Base of the Thriasians, on which has been found an artist's signature: *Καικοσθένης Δίης θρύψοι ἐποίησαν*. Some antiquities from Tripoli, confiscated at the Peiræus, among which are three marble statuettes of Artemis as huntress, and a funerary banquet remarkable because it is not in relief but in the round. Some vases from the tumulus of Marathon, among them an archaic amphora 63 cent. high with zones of natural and fantastic animals grouped around the winged goddess called the Persian Artemis.—*Revue Arch.*, 1892, I, 75.

OLD PARTHENON.—Mr. Penrose has published an article in the *Journal of Hellenic Studies*, in which he undertakes to refute Dr. Dörpfeld's theory

regarding the old Parthenon. He believes: (1) that the fragments set into the north wall of the Acropolis belong to the old temple which occupied the same site as the new; (2) that the archaic groups found on the Acropolis decorated the pediments of the old Parthenon.

KERAMEIKOS.—In the outer Kerameikos, near the road to the Peiraieus, many large archaic vases of the Dipylon style have been dug out, which, according to the director of excavations, Dr. Kabbadias, were set up over the graves instead of a monument or *stele*. In one place a square *peribolos* or enclosure, made of *plinthoi* or unbaked bricks, was discovered. Within was found a tomb used after cremation, over which was a cylindrical funereal monument made of the same kind of bricks, resembling the tumulus of Vurva.—*Athenæum*, Aug 8.

MARBLE HEAD.—In the new works of the Peiraieus-Athens railway station has been found the marble head of a woman, of good workmanship. She wears a diadem, and the features are very finely cut. It is thought to belong to a headless statue found on this site a short time ago.—*Athenæum*, Dec. 5.

MOUNT ATHOS.—BURNING OF MONASTERY OF SIMOPETRA.—A sad piece of intelligence has recently reached us from Mount Athos—the news of the burning of the monastery of Simopetra. In it has been lost many a treasure, but especially the library. Simopetra was not large, nor was it one of the oldest establishments on the Holy Mountain. It is said to have been erected in the fourteenth century (1363) by St. Simon, on a cliff difficult of access (whence its name), at the expense of the Servian ruler John Ungles. The Servian Emperor was himself one of the first monks.

According to the news that has reached us, the library is totally destroyed. There were 244 Greek manuscripts in all, 43 were on parchment and 197 were on paper. The four remaining ones I called *bombycini*. Of the manuscripts on parchment, 1 belonged to the ninth century, 6 to the tenth, 3 to the eleventh, 10 to the twelfth, 13 to the thirteenth, and 10 to the fourteenth; while of the paper ones, 1 belonged to the thirteenth, 9 to the fourteenth, 11 to the fifteenth, 40 to the sixteenth, 63 to the seventeenth, 16 to the eighteenth, and 1 to the nineteenth. The remaining 56 paper MSS. were ritual and service books, with Church notes from the fourteenth century to the nineteenth. Of the four so-called *bombycini* codices, one belonged to the thirteenth century, the three others to the fourteenth. Most of the codices contained works of the fathers or books for Church use. Among the forty-three manuscripts on parchment there were sixteen copies of the Gospels and three of the Epistles and Acts, eight works of St. Chrysostom, two of St. Ephraem Syrus, one of the speeches of St. Gregory Nazianzen, one of the speeches of Antonius Sinaita, one of works by Theophylact, Bishop of Bulgaria, four Psalters, *etc.* The rest of the

manuscripts on paper, besides those of Church music, contained five Gospels, five Epistles and Acts, six Psalters, eight lives of the saints, two works of St. Chrysostom, two of St. John of Damascus, one of St. Ephraem Syrus, etc. There were, too, four collections of modern Greek sermons (among them two of Maximus of the Peloponnesus), two Nomocanones, a treatise of Theophilus Corydalleus (of the xvii century) on Aristotle, a logic, and a treatise on physics by Vicentius Damodus of the xviii century, etc.

Of art there was little in the library of Simopetra. Five manuscripts on parchment and three on paper were the only ones which were adorned with ornamental titles and initials. Only four possessed miniatures; of these a paper ms. (in octavo) of the fifteenth century contained portraits of St. Basil, St. Chrysostom, St. Gregory, and St. Theodore. Two parchment mss., one of them a quarto of the twelfth century, the other an octavo of the thirteenth, comprised portraits of the four Evangelists. The richest was a parchment octavo of the fourteenth century, illuminated. It contained in all ten miniatures, a little vignette with the bust of David, David and Goliath, Moses, Hannah, Habakkuk, Isaiah, Jonah as he came out of the whale's belly, and the Mother of God; but the best pictures were that of the Three Children, over whom was depicted an angel sheltering them, and that in which Moses was depicted between two women on whom he laid his hands, while they stretched their hands towards him, so that their hands and the figure of Moses assumed the form of a cross. These illuminations were most of them faded; but the value of their artistic motives was great, and the picture last described particularly interesting.

There was also a palimpsest among the parchments of Simopetra. The commentary of St. Chrysostom on Aristotle was written in a twelfth century hand over the older writing; but the writing beneath was not Greek, but Georgian. There is also another loss of importance which quite eclipses that of the many later liturgical mss. all put together. It is the destruction of an *Ἀνθος τῶν χαρίτων* by Schannikios Kartanos, printed in Venice by Francesco Giuliano in 1594, a book which was bound up with the manuscript Physics of Vicentius Damodus. It was an exceedingly rare edition, very likely unique, for it was altogether unknown to bibliographers, who knew only the *editio princeps* of 1536 (printed by B. Zanetti), a unique copy of which is in the Munich Library, and an edition of 1566 or 1567 (Jacobus Léoncinus, Venice), the title of which is given by Papadopoulos Vretos in his *Neo-Hellenic Philology*, but of which the only copy known is at present in the National Library at Athens, a copy that lacks the title-page and several leaves.

According to my catalogue, several names of scribes were to be found on the mss. of Simopetra that should be added to the list in Gardthausen's 'Palæography.' Naturally most of these scribes belong to the period sub-

sequent to the capture of Constantinople, and have only local importance, as they were most of them monks on Mount Athos. I give the names alphabetically:—Antonius Monachus (1634). Arsenius Sacerdos (1695). Benjamin Janochorita (1788). Comnenus (sixteenth century). Constantinus Sacerdos (1189). Cyrillus Monachus (1586, 1587, 1588, 1589, 1590, 1609). Cyrillus Sacerdos (1626). Daniel (sixteenth century; four times in the manuscript without date). Dionysius Diaconus (1705). Dorotheus Monachus (1724). Elias Peloponnesius (1535). Jacobus Hieromonachus, afterwards bishop (1635). Joel (1568, twice). Leontius Monachus (1692). Lucas Cyprius, Metropolitan of Hungary and Wallachia (1635). Malachias (1305), the same, no doubt, who wrote the copy of Alexander Tralianus in the Laurentian Library (74, 10). Martyrius Monachus (fifteenth century). Metrophanes (1620). Nicephorus (seventeenth century). Nilus (sixteenth century). Paulus (seventeenth century). Rabulas Monachus, from Tricala in Thessaly (1580, 1583). Raphael (1611). Sophia, daughter of Rhicos Contojohannes (1469). Sophronius (1604, 1628), if these two mss. are by one hand. Stephanus Sacerdos (1414). Symeon Calandris (?), Priest and Proteclicos of Rhodes (1281), already known as the scribe of the Theophylact in the Escorial (Ω, i. 16); his family name is new. Theodorus Sacerdos (xiv century). Theophilus (1540). Zacharias Monachus, from Losetzi near Janina (1643). Zacharias Monachus (xvii century).

From this short account it will be evident that the loss of the library of Simopetra, which contained, besides its codices, 750 books—many of them old editions—is to be deplored, in spite of the slight importance of its manuscripts.—LAMBROS, in *Athenæum*, Aug. 1.

DELPHOI.—FRENCH EXCAVATIONS.—It is expected that excavations will be commenced this season at Delphoi. M. Homolle, in the course of an excursion, found in a garden an archaic female torso of a type similar to Athena, and a sepulchral distych, the epitaph of one Achilles who calls himself a Trojan.

ENOPE.—PREHISTORIC TOMB.—Near the reputed site of the Homeric city of Enope, in Messenia, a prehistoric sepulture has been excavated by the Greek Government, in which were found, amongst other objects, two very archaic *figurini* in lead, one representing a man, the other a woman. The whole has been transported to Athens.—*Athenæum*, Aug. 15.

EPIDAUROS.—At Epidaurus, the whole of the *cavea* of the Odeum, which is in the sacred enclosure of Asklepios, has been cleared, and the excavation of the *scena* is in progress. The pavement of the orchestra is found to be of mosaic.—*Athenæum*, Aug. 8.

The latest excavations have brought to light the ancient building at the southeast of the Temple of Asklepios and to the north of the Temple of Artemis, and herein were discovered the remains of the altar on which

the victims were sacrificed. Around it was a layer of black earth, in which were found ashes and bones of animals, with many fragments of small terracotta vases and bronzes. One terracotta fragment is important because it contains some archaic inscriptions belonging to the first years of the fifth century B. C., being *anathemata* to Asklepios and Apollo. To the northeast of the Temple of Asklepios were unearthed some *bathra* and *exhedræ*, and some votive inscriptions of Hellenic and Roman times. The whole *diazoma* of the temple was also cleared.—*Athenæum*, Jan. 2.

NAMES OF ARTISTS.—Facsimiles have been published by Kabbadias in the *Δελτίον* (1891) of the signatures of sculptors found by him at Epidauros. They are: *Spoudias*, *Athenogenes*, *Labreas*, . . . *kles son of Kallikrates*, *Eunous*, *Poron*, *Dion*, *Hektorides*, *Nikon*, *Kallikrates*, *Nikomenes*, *Timokrates*, *Thysandros*, *Theophilos*.—*Revue Arch.*, 1892, I, 96.

ERETRIA.—**EXCAVATIONS BY DR. TSOUNTAS.**—The *Hestia* of Athens publishes a report on the excavations recently executed at Eretria, in Eubœia, under the superintendence of Dr. Tsountas. More than five hundred tombs of different ages, ranging from the sixth century B. C. to the Byzantine period, have been opened. In a tomb of the third century B. C. was found a bronze mirror with two handles, of which one bears in relief a woman seated on a swan, to which she is giving water to drink out of a *skyphos*; while on the other is a woman on horse-back. In the same tomb was found another mirror having only one handle, bearing in relief the bust of a woman. In other tombs were found many vases of the fifth and fourth centuries B. C., of which the principal is a fine *lekythos*, representing in colors two women, with the inscription *Δίχας καλός*. Other mirrors ornamented with fine representations in relief came to light in other parts of the necropolis. In the tomb of a girl discovered at a depth of 4½ metres, consisting of a *larnax* of poros stone, were found four large *lekythoi* richly adorned with figures referring to funeral rites, and a *keramos*, of which latter we have but few examples left. On it are twenty-one figures of correct design, representing the rape of Thetis and nuptial scenes, with figures of Aphrodite and her attendants. Every figure has its name inscribed. The back of the *keramos* is ornamented with the bust of a woman finely worked, and painted in enamel, with the hair gilded.—*Athenæum*, Dec. 5.

GYTHION.—**THEATRE.**—Excavations have begun in the ancient theatre of Gythion, the former port of Sparta, in the gulf of Lakonika.—*Athenæum*, Jan. 2.

MOUNT LYKONE AND MEDAIA.—M. JOHANNES KOPHINIOTIS writes from Argos regarding the excavations on Mount Lykone, near Argos, and in the ancient Argolic city of Medaia: "In the excavations made lately under the amphitheatre I have discovered a series of one-and-twenty

rows of seats at a considerable depth, and the foundations of the stage and orchestra have come to light far under the soil. The countless pieces of marble which have been unearthed and the discovery of a stylobate make me sanguine as to architectonic discoveries." The orchestra is partly hewn out of the rock, partly covered with slabs of stone and calcareous sand. Behind the orchestra have been discovered five walls, one behind the other at short intervals. The first three are of the Roman period, the last two belong to the stage buildings of the Greek period. Among other things found are an aqueduct, two columns of *tufa*, a Roman inscription, and some coins.—*Athenæum*, Oct. 10.

MEGALOPOLIS.—We understand that Mr. R. W. Schultz is going out to Megalopolis in the autumn, at the request of the Committee of the British School at Athens, in order to make accurate plans and drawings of the results of the recent excavations on the sites both of the Agora and the theatre, and to record all the items of architectural evidence which have been laid bare. With Mr. Schultz's plans and evidence it ought to be possible to come to some trustworthy conclusion regarding the points at issue.—*Athenæum*, Aug. 15.

MELOS.—In the same field where the Aphrodite was discovered, there has been found the statue of a pugilist, over life-size, from which only the lower part of the legs is missing.—*Rev. Arch.*, 1892, I, p. 114.

MYKENAI.—The tombs whose discovery or study were mentioned on p. 145 have been since then more fully illustrated in the *Ephemeris* by Dr. Tsountas. One of the tombs was dug in the rock near two others constructed and decorated in similar fashion. The door, of trapezoidal shape, is decorated along its edge with polychromatic rosettes framed in wave-patterns. The type of the rosettes appears to be Asiatic, but the wave-pattern is strictly Mycenæan, and is found, for example, on the Cretan urns published by Dr. Orsi (*Mon. Ant.*, I, pl. 1). The tomb contained but a few articles: gold leaves, fragments of glass paste and of ivory plaques on which octopoi were engraved; in a cavity at the N. W. corner were some bones, a bronze vase, and above it a human skull. The bones were not burned, and there were but few traces of ashes. An interesting fact was the finding among the fragments of vases of one which belongs to the geometric style called "Dipylon;" this kind of ceramics is rare at Mykenai, but was introduced there while the Mycenæan style proper is still flourishing. Dr. Tsountas rejects the hypothesis of a violation of the tomb, the passage that leads to it showing no disturbance. The roof of this tomb has a characteristic not found yet either at Mykenai or at Sparta: it is inclined on all four sides, just as in a Cretan urn published by Dr. Orsi (*cf. Gréau Cat.*, pl. 1). This was probably the type of the private houses at Mykenai, while the tombs with angular vault and dome preserved the

remembrance of an earlier type. On the other hand, the excavations at Tiryns have proved that in the royal palaces of this period the terraced roof is the dominant type: this system of construction was of Oriental origin and best suited to dry climates. In classic Greece, the habit of angular roofs is maintained only in the temples by a sort of religious survival. The type of the royal palaces of Tiryns and Mykenai, whose model appears to be Egyptian, became, by development, that of the Greek and Græco-Roman dwellings.

The exploration of the tomb of Klytæmnestra led to the discovery of parts of the decoration of the façade, especially the channelled base of a half-column and a part of the half-column itself. In the centre of the tomb, at a depth of 60 cent. from the ancient level, a well was found communicating with the exterior by means of a water-conduit, and made for the purpose of drainage. Dr. Tsountas believes that, after each burial, the *dromos* was filled in: consequently, the decoration of the façade was but for the object of satisfying for a moment the pride of the great Achæan families.—S. REINACH, in *Revue Arch.*, 1891, I, pp. 89–90.

RELIEFS ON SILVER VASE.—In the fourth royal tomb at Mykenai, Schliemann discovered the fragments of a silver vase decorated with reliefs. It has only recently been cleaned and published by Tsountas in the *Ephemeris* (1891, pl. II. 2). Its importance is such as to place it, side by side with the vases of Vaphio, among the greatest products of Mycænæan art. The subject is the defense of a besieged town. In a mountainous scenery, in which are olive-trees similar to those on the Vaphio vases, are a number of nude warriors in picturesque attitudes and groups. They are armed, some with bows and arrows, others with slings, and are fighting in defense of the city under the orders of two robed chiefs on the right. In the background behind them is the city on whose walls are women encouraging their defenders with lively gestures. The scene is exactly like that described by the author of the shield of Achilles. There are no Asiatic elements in the composition, but it seems to have been executed by an artist who had seen Egyptian works.—*Revue Arch.*, 1891, I, p. 90.

ANTIQUITIES OF LATE MYCENÆAN PERIOD.—To the northeast of the Lion-gate, was explored in 1890 a group of houses whose contents appear to belong to the close of the Mycænæan period, when Phœnician influences predominated. Apparently, the houses had no doors but were reached by ladders. Among the interesting objects found was a bronze statuette of a man with right arm raised, similar to one found by Schliemann at Tiryns. There were also four double axes, three swords of the type in Schliemann's *Mycenae* p. 238, two other swords slightly different. Similar swords have been found at Ialysos, Karpathos, Korkyra, Corinth, Amyklai, and in Southern Italy. There were also two fibulae, different

from those hitherto found at Mykenai and like those of the Italian *terra-mare*.—*Revue Arch.*, 1891, I, pp. 91–2.

MYKENAI AND ATHENS.—Dr. Tsountas shows that in one of the houses mentioned above there were found four childrens' graves containing, among other objects, vases of Mycenæan style, one of which has elements of geometric decoration. To these he compares four childrens' tombs found on the acropolis of Athens, and a deposit of utensils similar to those of Mykenai. Some houses whose remains were found near the Pnyx, were reached, as at Mykenai, by steps, as in some ancient houses in Rome, also. Thus are multiplied the points of contact of the recent Mycenæan culture with that of Attika, and even of Italy.

CONCLUSIONS OF DR. TSOUNTAS ON MYCENÆAN CULTURE.—Dr. Tsountas' conclusions are unfavorable to the Asiatic origin of Mycenæan civilization. His main points are as follows: (1) the representations of divinities found at Mykenai may be explained according to Greek ideas; (2) at Mykenai and Tiryns, there are no remains of eatable fishes but there are of oysters, and the Greeks of Homer were not ichthyophagous while there is one common word in the Arian tongues to designate the oyster; (3) the Mycenæans are connected, on the one hand, with the Italiotes and other Aryans, and, on the other, with the Greeks of the historic period, whose civilization is a continuation of theirs; (4) the type of the Mycenæan house is adapted to a rainy climate and was imported from the north.—*Revue Arch.*, 1892, I, p. 92.

PAROS.—Dr. Lambakis, of Athens, has discovered in the island of Paros a Greek-Christian inscription giving the name of the founder of the church known by the name of Hekatompyliane.—*Athenæum*, Nov. 14.

PHLIUS.—The excavations here have been carried on by Mr. H. S. Washington of the American School at his own expense. No report on their results is yet at hand, but they are said to have excited considerable interest among Greek archæologists.

SAMOTHRACE.—During the autumn of 1891, M. Champoiseau, French minister, made excavations at Samothrace in the hope of finding there some more fragments of the famous statue of Nikê. His most important discovery was that of a fragment of inscription with the letters: . . . Σ ρ \omicron Δ ι \omicron Σ which was found in the very chamber where the statue was unearthed. This would support Mr. Murray's opinion that the statue was the work of a Rhodian artist whose name was here given but is now impossible to restore, as only the final letter remains.

The ruins of three sanctuaries were explored. In one of them was found a perfectly preserved inscription mentioning the names and origin of a number of pilgrims who had come from the neighboring island of Imbros to be initiated in the mysteries (in great honor among the Greeks) celebrated each year at Samothrace toward the month of August. The inscrip-

tion proves the existence, for the Cabiric worship at Samothrace, of a double degree of initiation in the mysteries, such as has already been proved for those of Eleusis; and it ends in an invocation to the great gods of Samothrace, which were, of course, the Kabeiroi. The inscription begins: "In the reign of Sabinus have been initiated the Athenian citizens Sokrates, son of Archelaos (other names follow). *Epeotes*: Publius Herennius, son of Leonteus of Azenia, Klaros, son of Klaros of Ixonia, Julius Hermippus. To the great gods of Samothrace."

A small marble figure was found, evidently a domestic divinity intended for the protection of a house; it is either a Hermes or one of the Kabeiroi, for it strongly resembles the figure of the Cabiric god Ἀξιοχέρως, part of the famous three-faced group in the Vatican.—*Chron. des Arts*, 1892, No. 3.

SPARTA.—TENTATIVE AMERICAN EXCAVATIONS.—Permission having been obtained to excavate in Lakonika, Dr. Waldstein decided to begin digging trial-trenches at Sparta. Permission was given him to dig trial-trenches in any private property without compensation, in order that the best sites might be tested before selecting a definite place for the excavations. He was also allowed to excavate on all government lands. Between thirty and forty trial-trenches were therefore dug down to the native soil in various parts of the city. The result went to prove that ancient Sparta was ruined not only by Mistra on the hill but by the mediæval Lacedæmon. On the site supposed to mark the Agora many walls were examined which were built of ancient material but were mediæval, the stones not being in any case *in situ*. As no traces of ancient buildings were found here, the Agora should be sought elsewhere, probably between the theatre and the circular hall of Epimenides. A trench was dug through the theatre 52 met. long, 2½ wide, with an average depth of 3 metres. Dr. Waldstein is of the opinion that, notwithstanding the well-known passage in Thukydides, ancient Sparta possessed many magnificent buildings and other works of art of the good period.

The principal discovery was that of a structure of the sixth century B. C. mentioned by Pausanias, the circular building of Epimenides. It has a diameter of about 100 feet, being consequently more than twice the size of the *tholos* of Epidauros. On its summit was found the base of a statue which appears to be that of one of the two statues (Zeus and Hera) which decorated the building, according to Pausanias. This *tholos* is not only important architecturally but because it will henceforth be the starting-point in the study of the topography of Sparta.

The walls of the so-called Leonidaion or tomb of Leonidas were completely cleared; this was, up to the present, the only building seen above ground. Dr. Waldstein regards it not as a monument but as a small temple *in antis*.

An interesting grave was opened, containing a metrical inscription erected by his wife to Botrichon a Hegemon of Sparta.

THESPIAI.—EXCAVATIONS OF THE FRENCH SCHOOL.—The French School is still excavating at Thespiæ, in Boiotia, and to the more than 200 inscriptions discovered lately must now be added 150 fresh ones taken out of the walls of Eremokastron, which are found to have been built mostly of ancient material. They will now be entirely demolished in order to the rescue of all the antiquities they contain. Several of the texts already discovered are in archaic characters. Amongst the various objects of sculpture that have thus come to light are an archaic head of Apollo, some figures of animals, several statues of women and bas-reliefs.—*Athenæum*, Aug. 8.

ZANTE=ZAKYNTHOS.—On the promontory Hieraka of Zante, has been found a hoard of ancient terracottas, consisting of vases, lamps, reliefs, and figurines. These last represent heads of men and women, figures of animals, centaurs, etc. Amongst the vases a lekythos is deserving of mention, as it represents satyrs pursued by a wild boar.—*Athenæum*, Nov. 14.

KRETE, THE SPORADES AND THE KYKLADES.

CHRISTIAN INSCRIPTIONS AND ANTIQUITIES.—Dr. HALBHERR publishes, in the *Athenæum* for Oct. 3, a letter on Greek Christian inscriptions in the Sporades, the Kyklades, and in Krete.

THERA (=SANTORIN).—A sarcophagus-front decorated with a cross and two rosettes, embedded in the wall of the church of Haghios Stephanos near the necropolis of Oia, has also a short inscription. It had been seen by Professor Ross in 1835, who was undecided whether to date it from the fourth or fifth or from the third or even second century. Halbherr selects the later date on account of form and corrupt orthography. The pagan names borne by the two persons mentioned prevent him from putting them at a more recent date. The text (consisting of one line) is as follows: + "Αγιε καὶ φοβερὲ Μιχαὴλ ἀρχάγγελε (sic) βοήθη (sic) τῷ δούλῳ σ[ον Χ]-αρίμῳ καὶ Μνημοσύνῃ κὲ (sic) ἰοῖς (for νιοῖς) Πε. ' . . " Holy and dread Michael archangel, succour thy servant Charimos, and Mnemosyne [his wife], and the children P. . . ."

MELOS.—In the south of the island of Melos=Milo not far from the slope of Mount Haghios Elias, in an out-of-the-way place, very little visited by travellers or archæologists, called ὁ κῆπος, there is a small church of the Panaghia, now half ruined and almost buried in earth and shrubs, which might well be cleared away, as the building deserves the attention of all lovers of Byzantine art. The church is crowned by a cupola adorned with Byzantine paintings of saints, within the centre a large head of the Pantocrator. In the upper portion of the apse are two seated figures, one of a

man, the other of a woman, who may represent the great emperor and empress reigning at the time when the church was built, or more probably the most popular saints of the Eastern Church, Constantine and Helen. The inscription is carved in good letters on the front rim of the *ἀγία τράπεζα*, a thick stone of white marble, belonging, it would seem, to the base of some ancient statue, a little cut and rounded off on this side. It is an invocation to St. Theodore, perhaps the original patron saint of the church, + "Ἄγιε Θεόδωρε φρόντιζε ἡμῶν + "St. Theodore, have care of us." Its date is but slightly later than the preceding.

AMORGOS.—In this island, amongst others, the following inscription is found, in front of the church of Haghia Sophia, in the village of Langada. It is inscribed partly on the upper rim, partly on the shaft, of a small column which belonged to the harbor of the ancient city of Ægiale, where may still be found the ruins of several old churches. The inscription refers to a vow of an *actuarius*, called Kyriakos to St. Michael, and to some other saint, whose name is preserved only in a fragment which may stand for Andrea: *Εἰς τὸν ἅγιον Μιχαῆλα καὶ Ἀνδ[ρέαν] ὑπὲρ εὐχῆς Κυριακοῦ ἀκτοναρίου.*

KRETE.—Of a Cretan inscription of several lines referring to the construction of part of a sacred edifice in Gortyna, near the Temple of the Pythian Apollo (made known in an imperfect copy by Falkener in the *Museum of Classical Antiquities*, vol. ii, p. 279), I may have something to say on another occasion. I will, however, here communicate several small fragmentary inscriptions copied by me here and there on the island. The most interesting is one from the city of **CHERSONESOS**, one of the most ancient episcopal sees of Krete, already mentioned at the time of Nikephoros Phokas, afterwards appropriated by the Latins, and still furnishing a title to the Greek bishopric of Pedhiada. It consists of an imprecation against those who polluted by filth a certain locality, which we may suppose was in front of, or in close proximity to, some church or other sacred precinct, and is to be found sculptured round the base of a column of white marble, 0.25 mètre in diameter, now preserved in a house of the village of Kutulupkari, not far from the site of the ancient city: + Ὁ ποιῶν ἐνταῦθα ῥυπαρίαν ἐχέτω τὸ κρ(ίμα) + : "He who commits a nuisance in this place is guilty of sin," or else "is deserving of punishment." This inscription is similar in tenor and in form to the pagan ones which may be seen in certain places on the walls of Pompeii.

Two sepulchral inscriptions belonging to the city of **GORTYNA** are given; but their fragmentary condition allows us only to say that they contain the stereotyped formula common to this kind of epigraphy.

At Gortyna there is also a small white marble *stèle* having on one side the following invocation to St. Nicholas: "Ἄγιε Νικόλαε βοήθησον τῷ χωρίῳ τούτῳ καὶ πάντα, and on the other the beginning of the *trisagion*: "Ἄγιος ὁ

Θε[ός. . . . Although the form of the letters is sufficiently good, the word *χωρίον* describes the period when villages began to be planted on the site of Gortyna. Here the allusion is probably to that of Haghioli Deki (the Holy Ten), or to another a little more to the west, Metropolis, where a church still exists dedicated to St. Nicholas; but the peasant who discovered the marble intimated that it came from near the Temple of the Pythian Apollo, where there was also a very ancient church, now almost wholly destroyed.

Another fragmentary inscription, probably also sepulchral, is walled in a house of Haghioli Deki. We here see a proper name *Saturos* in the first line, and at the bottom a mutilated phrase with the words *ἐν πόντοις*, allusive, if I do not err, to the Christian notion of earthly sufferings which procure eternal rest. On the exterior of the apse of the ancient church of St. Titus, now called of the Panaghia (Κερά), near the river Lethaios, and the site of the great inscription of the laws of Gortyna, there was also a Christian inscription observed by Spratt, but it has now perished amidst modern repairs. It is probably the same that was copied many years ago by the Greek Chourmouzes Byzantios, and by him published in a pamphlet, rare and very little known, printed at Athens in 1842 under the title of *Κρητικά*. I reproduce it, therefore, here in order to supplement and illustrate what Admiral Spratt says in his description of that important Christian edifice, which was built for the most part of ancient materials, near the *agora*, or forum, of the city of Gortyna. The inscription, divided into three lines, of which two are vertical and one horizontal: †—† is a prayer to God of two persons, who beg protection for themselves and for their relations: † Κύριε βοήθι (sic) τοῖς δούλοις Σου Λεοντίῳ κ' Ἀνδρέᾳ καὶ πᾶσι τοῖς μετ' αὐτῶν † "O Lord, help Thy servants Leontios and Andrea and all those who are with them." But another small inscription, which has escaped the attention of all, I discovered in the interior of a small recess or chapel, to the right of the body of the church, about the middle, where there exists also a piece of broken slab of Roman times, itself also hitherto unknown, with the letters [im]P(erator) CAES(ar. . . .) | P(ater) P(atrice). . . . It is cut along the upper border of a worked block of local stone, and gives us the name of an unknown individual called Titus Carpius, perhaps a priest or other sacred minister of Gortyna, baptized by the name of the first bishop left in Krete by St. Paul.

At the eastern extremity of the island, the city of ITANOS, of which the site has recently been discovered at Eremopolis of Sitia, must have possessed a Christian church. The remains of one are to be found almost in the centre of the ruins, and from this place we have the monogram of Christ carved on a bluish stone, with ornamentation in relief. A frag-

ment of a square slab of marble, with a border or cornice bearing the single word [ὁ]νόματα, and a small cross to the right, was found in the same place, and is preserved in a small grange belonging to the Greek monks of Toplu-Monastiri. I do not give it here, as it is, I suppose, the head of a catalogue of names which may come to light at some future date.

The whole of this part of Krete, from the Capo Salmone of the ancients, now Capo Sidero, to the isthmus of Hierapytna, although carefully examined by Spratt, still remains very little explored, and, owing to its retired position, is generally neglected by travellers. But its richness in remains of ancient cities, and in memorials of every period of Cretan history, and even of prehistoric times, is, in my opinion, such that I would warmly recommend it to the study of archæologists as well as to the historians of mediæval, Venetian, and modern times. Many Christian monuments, amongst which are several churches enriched with paintings and mural inscriptions, still await inspection. Of the Hellenic remains, and of some Cyclopean constructions as far as regards the prehistoric age, as also of some monuments of the Venetian dominion in recent times, I hope myself to give hereafter an account.—FREDERICK HALBHERR.

ELEUTHERNA.—ARCHAIC STATUE.—The archaic statue, the discovery of which at Eleutherna, in Krete, was announced last year, has now been more thoroughly examined by Dr. E. Löwy, who considers it the first example of an early style indigenous to that island, which was carried by the pupils of Daidalos into Greece. The upper part alone remains, and the existence of color can be only surmised by the lines dividing the body into bands and by some traces of rosettes. The hair falls in eight curls down the back, over a closely fitting chiton fastened by a girdle round the waist. The figure, at first thought to be an *ephebos*, is now considered by Dr. Löwy to be that of a woman, the slightly swelling breast finding its analogy in the statue dedicated by Nikander at Delos. A strong likeness is seen between the Cretan statue and one recently discovered by the French at Tegea. It is known that Endoios and Cheirosophos (both of Krete) made statues for the temples of Tegea, the former of Athena Alea (afterwards carried by Augustus to Rome), and the latter one of Apollo and another of himself.—*Athenæum*, Aug. 15.

KNOSSOS.—EXCAVATIONS BY THE FRENCH SCHOOL.—The excavations of the French School at Knossos have been entrusted to M. Joubin, who for several months has been engaged travelling in Krete, visiting all the ancient cities except those of the western provinces.—*Athenæum*, Aug. 1.

M. Joubin has begun by studying the archaic monuments belonging to the Syllagos at Candia, which will be published by him with phototype illustrations.—*Athenæum*, Nov. 14.

ITALY.

PREHISTORIC AND CLASSIC ANTIQUITIES.

ITALIC STUDIES.—Dr. PAULI has published vol. III of his *Altitalische Forschungen*, under the title *Die Veneter und ihre Schriftdenkmäler*. At the beginning of this century, inscriptions in any of the old Italic alphabets were all indiscriminately classed as Etruscan. When, at last, the Euganean, Oscan, Messapian, and Faliscan records had been classified and deciphered, some 5000 inscriptions remained, which were arranged in two divisions. Those from Etruria proper were called Etruscan, and those from the valley of the Po were designated as "North-Etruscan." The first class has been attacked with considerable success by Dr. Pauli, Dr. Deecke, and other scholars, and, with the exception of about a score of the longer records, have been successfully interpreted. The so-called North-Etruscan inscriptions—about 350 in number—chiefly obtained from the cemeteries at Este, Padua, and Vicenza, with a few from Cadore and Carinthia, refused to yield to the analytic methods which had proved successful with the inscriptions from Etruria proper. These northern records Dr. Pauli has attacked in the new volume of his *Altitalische Forschungen*; and he has succeeded in proving that, with a few exceptions, they are not Etruscan, but belong to the Aryan family of speech. Some are Celtic, and must be assigned to the Cisalpine Gauls; but the greater number, he contends, are written in an hitherto unknown language, which he calls Venetic, and which he considers to be the prototype of Modern Albanian, representing the old Illyrian, one of the missing links in the chain of proto-Aryan speech. Its nearest congener he considers to be the Messapian, spoken in the heel of Italy, which was exterminated by the Hellenic speech of Magna Græcia. According to this theory, the Messapians and the Veneti were Illyrian tribes which crossed the Adriatic, and established themselves on the opposite Italian coast, bringing with them an alphabet not derived from the old Italic, which was a Greek alphabet of the Chalcidian type, probably introduced by the Greek colonists of Cumæ, but based on the alphabet of Western Greece, as is shown by its agreement with the older alphabet used in Greek inscriptions from Elis, Locris, and Corcyra. The so-called North-Etruscan alphabet does not, therefore, as has been hitherto supposed, belong to the Italic class, but must be affiliated rather to the Corinthian, or Western type, from which the alphabet of Corcyra was derived. Dr. Pauli gives facsimiles of nearly 300 of these Venetic inscriptions, which he ascribes to the period between the end of the fifth and the second centuries, B. C., that is, after the Etruscan power on the Po had fallen before the inroad of the Gauls. Dr. Pauli's

book is one of immense labor and research, and his investigations exhibit his well-known ingenuity, skill and caution.—*Academy*, Jan. 2.

LONG ETRUSCAN INSCRIPTION ON PAPYRUS.—Professor Krall has communicated to the Academy of Vienna the results of his examination of the inscribed band on the mummy of a woman in the museum at Agram, which was brought from Egypt by Michael Baric in 1849. H. Brugsch, in the winter of 1868–9, had already found on the mummy the end of a band (which afterwards proved to be 14 metres long) almost entirely covered with characters to him completely unintelligible. The director of the museum having apprised Prof. Krall of the event, the band was brought to Vienna, and at length, after eleven months' study, discovered by him to be the longest Etruscan inscription known to us, the longest hitherto supposed extant being the Perugian cippus, containing 125 words. The Etruscan mummy-band contains 1,200 words, divided into some 200 lines, distributed in at least 12 columns, after the fashion of writing on papyri. The material is undoubtedly of ancient Egyptian manufacture, and the ink shows the same color as that of the ordinary writing on mummies. According to the Etruscan scholars Bücheler, Deecke, and Pauli there can be no doubt whatever about the authenticity of the text, so if this real relic of antiquity comes to be read, our knowledge of Etruscan will be assured. So far Prof. Krall has presented to the Academy an unpublished tentative reading, restoring the text and adding a list of all the words occurring in it, with additions and explanations by W. Deecke. Messrs. Eder have succeeded in making photographs of the text.—*Athenæum*, Jan. 23.

NEW REGULATIONS REGARDING MONUMENTS AND OTHER WORKS OF ART.—The present Minister of Public Instruction in Italy, Signor Villari, has recently issued a series of documents deserving the attention of those interested in the preservation of public monuments. They display an evident desire to deal seriously with the question, and are calculated to impress on the municipal authorities throughout Italy the necessity of fulfilling their duties in this particular. The first, dated June 26, is addressed to the Prefects of the kingdom, directing them to call the attention of the municipalities to certain articles of the communal and provincial laws, and requiring them to make a list of the public monuments, noting their artistic and historical interest; forbidding the destruction or defacement of such monuments, and not permitting the owner to repair or touch them without previously giving notice to the proper official. If, in repairing or demolishing a building not on the list, any remains of the past are discovered, the proprietor must suspend operations and give notice of the discovery to the municipality. A second circular, dated August 7, is conceived in the same spirit. A third appeared on September 7, especially relating to the inscriptions on monuments of the past.—*Athenæum*, Nov. 21.

ALBISOLA (LIGURIA).—Remains have come to light here of the Roman city of *Alba Docilia*. Tombs were found in the shape of triangular prisms. Of the coins found one was of Augustus and Agrippa, and another of Drusus.—*Not. d. Scavi*, 1891, pp. 219–21.

ARCEVIA (UMBRIA).—**PREHISTORIC VILLAGE AND ITS IMPORTANCE FOR PALETHNOLOGY.**—Four kilometres from Arcevia in the province of Ancona, near a bridge over a brook on the road to Piticchio, investigations made by Professor Brizio have led to the discovery of a prehistoric hut or *fondo di capanna*. It is of concoid shape and excavated in the clay which forms its substratum; its greatest depth is 4.20 met.: its greatest diameter 4.50 met. A fact not observed in any other known examples, is that it consists of what might be called two superposed stories, separated by a stratum of clay of about 70 centimetres. The lower part is of a peculiar shape, and the whole resembles in outline a chalice with its foot. The two stories are easily explained on the hypothesis that the inhabitants, finding the original floor of their hut overrun with bones and crocks, spread over it a new layer of clay. There were found arrows, javelins, and a quantity of flint-chips, bones of animals, discoidal *fusaiuole*, a stone hammer, and numerous fragments of vases. The arrows and javelins were of very careful workmanship, but evidently cast aside as refuse because of defects. This not only is evidence against those palethnologists who denied to the inhabitants of the *capanne* the use of bows and arrows, but shows that they made their arrows in the huts themselves. In the centre was the fireplace, and near it the bones of animals, and even those of a dog, which some have denied to these people. The fragments of vases were in some cases rude, in others fine.

The lower stratum was then examined and yielded similar objects with additional varieties. The importance of the excavation of this hut consists in that many of the objects found in it (such as pieces of deer-horn, *pestunculi*, discoidal *fusaiuole*, bones of domestic animals), as well as the vases, are the exact counterparts of those found in the *terremare*.

From continued investigations, it was found that there existed near the bridge called *ponte delle conelle* a village of *fondi di capanne* along a radius of over two hundred metres. Of all such villages discovered in Italy this is without doubt the most important, because, even judging from the little that has thus far been found, it is destined to modify many opinions that have prevailed among some palethnologists with regard to the culture, customs, and industries of the hut-dwellers and their relations to the inhabitants of the *terremare*. In fact, basing themselves upon the remains of the huts found in the province of Reggio, Professors Chierici and Strobel had asserted in 1877 that the inhabitants of these stations were not acquainted with the dog, were not agriculturalists, but only hunters and shepherds, and executed pottery entirely different from that

of the inhabitants of the *terremare*. Several of these assertions were already contradicted by previous discoveries at Bologna (*villa Bosi*), in the valley of *Vibrata*, at *Prevosta*, etc., but not so conclusively as by the present discovery. It can now be confidently asserted that there was so great an affinity between the two that they should be considered as representing either the same people in two successive periods or two branches of the same people.—*Not. d. Scavi*, 1891, pp. 241–47.

BENEVENTUM.—A ROMAN BRIDGE.—In studying the remains of the classic period in the bridge called *Leproso* or *Lebbroso* over the *Sabato* near Beneventum, Sig. Meomartini found a block of the ancient parapet of the bridge which joined to another gave the following part of a monumental inscription showing that the bridge was restored between 367 and 375 A. D. under Valentinian, Valens, and Gratian.—*Not. d. Scavi*, 1891, p. 276.

GREAT ST. BERNARD.—PLAN DE JUPITER.—On September 11, at the excavations on the site of the Temple of Jupiter on the St. Bernard, the workmen unearthed a statue of Jupiter, forty centimetres high, of admirable workmanship, and in good preservation. A short time ago they found a bronze lion ten cent. high, and a number of medals. All these finds are the property of the monastery of St. Bernard.

The excavations undertaken here during September by Prof. Von Duhn, of the University of Heidelberg—with the assistance of Signori Castelfranco and Ferrero, who acted as commissaries of the Italian Government, were brought to a close in October, and the results, which are noteworthy, will shortly be made public.—*Athenæum*, Sept. 26; Oct. 24.

CANOSA.—MIRROR-CASE.—At Canosa has been found a bronze which, on account of its evident use as a mirror-case, is of unusual interest. That it is not a mirror is shown by the absence of a handle and by a hole which was evidently for the purpose of attaching it to the other half of the case. The interior design is made with a sure and free hand, if somewhat coarse, and has the characteristics of Italo-Greek art of about 300 B. C. Though badly damaged, the scene can be made out to contain three figures. The best preserved is that of a fully-draped woman gracefully bent forward, with her arms clasped about the waist of a very young girl, entirely undraped, who throws her arms about her neck and stands on tiptoe to kiss her. The third figure, of which only the lower part remains, is that of a man, who stands aloof. It is conjectured to be the meeting of a mother with her lost child restored to her by some hero, and, specifically, the return of Helen to her mother Leda from Aphidna. She had been carried away by Peirithoos and Theseus, while still a child, and was delivered and restored to her mother by her brothers the Dioskouroi. It is well known that Helen was often represented entirely or nearly nude, so as to lead to her being confounded at times with Aphrodite. Pollux may have been

represented here alone, as her full brother; though there is room on the ruined side of the cover for a fourth figure. There are other monuments, both mirrors and vases, that confirm this interpretation of Sig. Jatta.—*Not. d. Scavi*, 1891, pp. 207–11.

CASTIGLIONE DEL LAGO.—DISCOVERY OF AN ETRUSCAN NECROPOLIS.—

A hill called *Bruscalupo*, nine kil. from the lake of Chiusi and five kil. from that of Trasimene, was originally the site of an Etruscan town which flourished at a late date and was early deserted, the remains dating from the third and second century B. C. This is another proof that the period of the social war followed by the Marian civil war was fatal to this region. Nothing as late as the Roman period has yet been found here. The necropolis had yielded, among the earlier tombs, examples of late vases with carelessly painted white figures such as were in vogue only at the close of the third century B. C. Sixteen tombs were excavated, all of the same date and fronting to the south, but of three varieties. The first and most used of these kinds is interesting as a transitional form from the Etruscan to the Roman tomb. It is in the form of a simple alley open and incased in the tufa against the *poggio*, in whose walls, especially to the right, are excavated niches or *loculi*; it ended in a wall cut *a picco*. The second kind consisted of the same alley leading to a wall in which was the entrance to the tomb: of this there were three specimens. The third variety was the mere tomb with one or two chambers around which the funeral benches were arranged. The first of these varieties merits careful study. The alleys, placed side by side, go deeper and wider as they advance, in the shape of an open ditch: the width increases from a half metre to over a metre, and the depth increases to such a degree that the deepest, at the end wall, measures over five metres. The niches excavated in the rock-walls are placed in a row not one above the other but at a height varying from 30 cent. to over two metres from the floor. In them were placed the urn of *coccio* or sometimes of marble, usually decorated with reliefs, and the cinerary *olla*: mixed with the ashes are some personal objects and outside are some small vases almost always common and unvarnished. The opening was usually closed with a tile giving the name of the deceased; but not always, especially if the name was on the urn or the *olla*.

These family burial-places were not excavated all at one time, but gradually, as a death happened in the family. The alley was begun on the first death, a first nich was cut, a funeral rite performed, and then the whole covered in with earth, leaving some sign to mark the spot. On the next death, the alley was continued without touching the previous section, and so forth. Cremation was practised in connection with these *loculi*, which were the prototypes of the Roman *columbaria*; but, in cases where inhumation was desired, a chamber or cell was excavated at the end of the alley

for that rite. Perhaps also the cell was for the master and his family and the alley for the dependents and slaves.

The entire region between the lakes of Chiusi and Trasimene is honey-combed with tombs that appear to show the general use of this system, and nowhere are there any Roman remains. The desolation of the land can be accounted for by the facts of the campaign of Sulla against Carbo who remained in Italy to sustain the cause of Marius. Carbo's last stand was made between these two lakes, and a bloody battle was fought; and, with our knowledge of Sulla's cruel vengeance, it is most probable that these towns which held for Marius were then totally destroyed, and were never re-inhabited.

[N. B. For the subjects of the reliefs on the funerary urns and for inscriptions, readers are referred to the *Scavi*.]—*Not. d. Scavi*, 1891, 223-31.

ANOTHER ETRUSCAN NECROPOLIS.—Near *Villa Strada* in the neighborhood of the lake of Chiusi there have been opened some tombs that belong to different periods and contain urns, some of which bear inscriptions. The necropolis appears to cover quite a period, as the objects date from the fifth to the second century B. C.—*Not. d. Scavi*, 1891, p. 284.

CUMAE.—TOMBS.—Two tombs were lately opened. The first belonged to a child; the second contained, besides, painted decorations. The painting represented, on one side, a seated woman holding a mirror, and, on the other, a figure that was not identified, while above was a siren.—*Not. d. Scavi*, 1891, p. 235.

ESTE.—PRE-ROMAN TOMBS.—In the construction of a new wing of the *Pia Casa di Ricovero*, more tombs were opened which belong to the Euganean-Roman necropolis of S. Stefano. They belonged to the third period of Euganean civilization. The objects found in them were unusually numerous and consisted of terracotta vases worked with a turning lathe, bronze vases, and decorative objects. Most of the vases have a geometric decoration in colors, and belong largely to native manufacture. Three of the tombs were *a cassetta*, but the fourth was of the rarer *well*-form and its contents were somewhat earlier in character and presented peculiarities and rarities of form.—*Not. d. Scavi*, 1891, pp. 175-91.

KAULONIA (CALABRIA).—Dr. ORSI has now published a report on the discoveries made in constructing the new light-house of Capo Stilo in Calabria. Besides remains of an Hellenic wall of large blocks of Syracusan limestone, many archaic objects of terracotta came to light, amongst which is the torso of the figurine of a woman with on her head the *kalathos*. This is probably an Aphrodite, like those of Lokroi. A small *herma*, also with a *kalathos*, was likewise found, and several small *aræ*, either for lighting the sacred fire or for bearing the *anathemata*, having their faces decorated with archaic figures in relief of animals in combat—remains of a small

temple dedicated to some sailors' god, as Poseidon, Taras, or Apollo of Delphoi. So we must judge from the fragments of painted terracottas, evidently used for architectural purposes, which were found on a promontory of the coast corresponding to the Cocynthus of the ancients. One piece bore the figure of Taras riding on a dolphin. This site appears within the boundaries of the ancient city of Kaulonia; and other ruins, viz., of a Græco-Roman villa, and of a cemetery used by the inhabitants in barbaric times, were found on the same spot. The tombs were without grave-goods.—*Athenæum*, Oct. 3.

NUMANA (PICENO).—PRE-ROMAN NECROPOLIS.—This necropolis is situated in the province of Ancona. It was already known by the extraordinary quantity of antique objects found there and purchased at Sirolo, near by, some thirty years ago by Count Pompeo Aria, who now has them in Bologna. They included bronze helmets, greaves, kraters and other painted vases, armlets, fibulæ decorated with enormous pieces of amber, iron swords, vases of local manufacture, etc.

The object of the recent excavations was to obtain information regarding the pre-Roman civilization of the province of Ancona. They were conducted for the government by Prof. Chiavarini, under the direction of E. Brizio, the archæologist. As the report regarding them was made in three successive sections in the *Not. d. Scavi*, this arrangement will be here maintained.

FIRST REPORT, up to May 20, 1890.—The tombs are all for inhumation, and consist of large trenches dug in the earth to a depth of from 2 to 2.20 metres: the bodies were always laid from E. S. E. to W. N. W. in rows placed so close together that the feet of one body at times rested on the head of the next. All rested on a stratum of marine *breccia* 2 met. long by 30 cent. wide and 6 cent. thick. Usually there was no outward sign of the site of these burials; only two large blocks of stone were found that appeared to have been sepulchral stelæ, one 80 cent., the other 50 cent. high. The graves were at times intact, at times rifled. In the latter only a few fragments of bones and broken vases were found, and in some cases a few whole objects regarded as of no value. In those that were not disturbed the skeletons were surrounded at their feet by groups of vases arranged in regular order; the graves of warriors contained arms to the right and even to the left; at the feet and head were bronze fibulæ. In only one grave was the group of vases at the feet of the body covered with a slab of tufa. The following are the main categories of objects found.

1. *Fictile Vases*.—Two kinds should be distinguished; those of local manufacture and those imported. The former are usually of crude *impasto*, heavy, with irregular curves, are made of reddish, dark, or greyish earth, and repeat the shapes of the *olla*, the *oinochoe*, the *skyphos*, and flat dishes with small feet. Some, however, are more refined, of yellowish terra

and with one or two painted bands, red or black: some of the best executed, especially the *oinochoai*, appear to be imitations of both terracotta and bronze Greek vases. All the imported vases are Greek, and are both painted and varnished. They belong to the last period of vase-painting: the large vases, such as amphoræ, kraters a *colonnnette*, and kraters a *campana*, *stamnoi*, are lacking, whereas there are plenty of *pateræ*, *skiphoi*, and *oinochoai*. The figures, whether red on black ground, or black on red ground, all show careless design and rapid execution. There are no mythologic representations, but mainly of two young athletes conversing or winged Nikes. The Greek varnished vases are more numerous and of more elegant and varied shapes; especially abundant are the *pateræ*, *kylikes*, *oinochoai* with a mouth of *edera* leaf shape or oval, or decorated with masks or rosettes. The elegance of the shapes is increased by the perfection of the varnish and certain delicate ornaments. This class of vases was held in high esteem, as is shown by the care taken to mend them. While each tomb contained between ten and twenty vases of local manufacture, it had only one or two painted or varnished vases.

2. *Bronze Vases*.—These are fewer in number and shapes, and are for domestic use. Excepting a *situla*, all are similar to those found in the Etruscan tombs of the Certosa at Bologna.

3. *Arms*.—The arms—axe-heads, lances, swords, javelins, poniards—all of iron, have for the great part suffered from oxidation. The axe-heads (*accette*) are reproduced in form by the modern *mannaie*. The swords were placed broken in the tombs, on account of some funeral rite. The lances constitute the great part of the arms; each is provided with its *sauroter*. One shield was found.

4. *Decorative objects* are remarkably scarce and of rather poor quality. There are necklaces, two silver rings, and *fibule* of four distinct types, all belonging to the Certosa class.

The period of the tombs, considering the fact that they do not contain any painted vases of the fine style but only those of the decadence, may be dated between 350 and 300 B. C.

SECOND REPORT, up to Jan. 13, 1891. The results of this second excavation were even more important for both the number and the importance of the objects. The thirty-two tombs found differ from the preceding mainly in the greater richness of their contents. There is still a great preponderance of vases of local manufacture, but the imported vases are more numerous and important. Besides the two classes of the latter already enumerated (the painted and the varnished) there is a third class, of *skyphoi* and *oinochoai* painted with spirals, garlands, or large wreathed female heads. Some tombs contained as many as five imported vases, some of large size. In this part of the necropolis the finest vases are the kraters,

which are of good style and well preserved: two of them only are painted with entire figures—in white—the others have garlands, spirals, or female heads. In general, these kraters resemble those found in the tombs of the last period of the Faliscan necropolis now in the museum of the Villa Giulia, Rome. Their manufactory was either contemporary with or immediately succeeding that of the painted *kylikes*. Some of the *skyphoi* found are like those of the Gallic Benacci tombs at Bologna. The painted Greek vases are as carelessly executed as in the former series. Nearly all of them, as well as the varnished vases, had been anciently mended, showing the high esteem in which they were held.

Fourteen *bronze vases* were found, similar to those of Bologna. Many arms were found, and it is remarkable that more than half the tombs in this group were of warriors. Among them were seventeen lances, comparable to those found in the Gallic tomb of the province of Bologna. Other arms were scarce. Most remarkable for beauty and preservation, and unique in type, are two large curved swords, similar to Turkish cimeters. Only thirty *fibulae* came to light.

THIRD REPORT. *Earlier Tombs*.—It became the excavators' object to open up a part of the necropolis that should contain earlier tombs. Taking advantage of the fact ascertained (*e. g.*, at Corneto-Tarquini and Bologna) that the older tombs are nearer the city, a site was selected on the Petromillé property only about a hundred metres from the ancient walls. Three very archaic tombs had already been discovered there. In one of them the skeleton was placed with bent knees as in the earliest prehistoric tombs: the *fibulae*, the rings of bone and amber and paste were all similar to those in the earliest Benacci tombs at Bologna. In the stratum above these tombs a very archaic Latin inscription was found scratched on the bottom of a vase. It turned out, however, on beginning regular excavations, that the early tombs had been devastated during the Roman period.

About two kilometres from the city on the Nembrini property, traces were found of the existence of an archaic necropolis some of whose tombs were barbarously destroyed by the peasants. *Fibulae* were found in these tombs. Some other tombs were found on the Mazzoleni property, belonging to the same late period as those of the main excavation.—*Not. d. Scavi*, 1891, pp. 149–55; 193–6.

OSIMO.—PRE-ROMAN ANTIQUITIES.—In some tombs that have been opened near Osimo, were found objects that strongly resembled those found in the tombs of the Marchetti property at *Numana* (*q. v.*). There were seven tombs for inhumation which contained iron arms, bronze *fibulae*, and terracotta vases both imported and of local manufacture. One of the vases is a Greek cup with red figures of fine style and accurate execution of the beginning of the fourth century B. C., representing an old man de-

taining a youth. Two swords are like Turkish scimeters, such as were found at Numana, Tolentino, Falerii, and Perugia.—*Not. d. Scavi*, 1891, p. 282.

POMPEII.—DISCOVERIES, ESPECIALLY OF PAINTINGS.—In the *Not. d. Scavi* for August 1891, Prof. Sogliano gives a detailed report, especially of the buildings that have been excavated in *Insula 7, Reg. ix.* These buildings are numbered V, VI, VII on the main street, and 11, 12, 13 at the entrances on the back alley.

No. V gives access to a modest group of rooms annexed to a building which opens by 12 and 13 on the back street. It is also described by Prof. Mau in *Bull. Ist. arch. germ.*, vol. v, pp. 236 ff. Cubiculum *m.* near entrance 12 has a pavement of *opus Signinum* and walls with a white ground on which, in each central compartment, there is a painting without frame. On the west wall is a musical contest. A bearded man of noble mien is seated in a high-backed chair; on his head is a gold crown, and he wears a violet chiton over which falls a green mantle; in his lap rests a heptacord which he is touching with his left, while in his right he holds a plectrum. He appears to be listening to his rival, a young woman, who stands before him, crowned with leaves, draped in a long yellow chiton; she is playing on a seven-corded *chelys*. This is a copy of Helbig *Wandg.*, No. 1378, 1378^b. In the central compartments of the other walls are the usual sanctuaries with their sacred tree; in one of them is the idol and two worshippers with an inscription giving *pophus* as the name of the tree. In the *sacrarium* of No. 13 near whose niche is painted a group of five figures, much damaged, among whom is the genius of the family. On the left is the genius again, and from the inscription EX SC it is supposed that in this case the genius represented is not the usual *Genius familiaris* but the *Genius Augusti*. A number of inscriptions were scratched or painted in red on the walls.

Prof. Mau suggests that this house was an inn, but Prof. Sogliano considers it more likely to have been a *hospitium*, while the smaller house next to it may have been an inn, which is entered by door 11. Its painted *lararium* in the *viridarium* is in very bad condition. Bacchus is represented with the panther, a bull, a goat, *etc.* In the compartment on the right are two Bacchic scenes; above, a male and a female bacchant, and below, a crowned Silenus. Two similar scenes are on the left.

Entrance VII on the main street leads into the modest house of *P. Aemilius Celer*, the well-known writer of programs. Though small it is quite well decorated. In the *lararium*, the veiled Genius stands between the two *lares* with the usual attendants and accessories.

In a room of a small house south of that of the *Centenario* has been found a fresco of Theseus abandoning Ariadne.

Paintings and inscriptions elsewhere.—On the wall of a vestibule in Reg. IX E. of Ins. 7, is a *programma* painted in red: T CLAVDIVM VERVM | II VIR · OBELLI · CVM · PATRE · FAVE · SCIS · VERO · FAVERE. It is the first time that the name *Obellius* appears on wall inscriptions.

In Reg. v, Ins. 2, house 10, is a painting in the *tablinum* representing Hippolytus and Phaedra. Phaedra is seated, in front of her is her nurse approaching Hippolytus with the diptychs, who is making a gesture of refusal, while near him is a man with a horse. The *graffito* NON [E]GO SOCIA is evidently a reminiscence of the Ovidian epistle of Phaedra: *non ego nequitia socialia foedera rumpam*. In the second room is a painting of Daedalus and Pasiphae. In an eastern chamber are four subjects. The first is Daedalus and Icarus. Helios is above in his flaming chariot, while Icarus is falling: below is Daedalus, a boat in the sea, rocks, with a fisherman, and in the distance a city. The second painting represents three worshippers approaching a sacred tree placed by a column and a feminine idol. The third scene represents Athena, Marsyas and the Muses, in mountain scenery, the episodes showing Marsyas both before and after the finding of Athena's tibias. In the fourth picture we see Hercules and the Hesperides.

In shop No. 14 two pictures were found, which were published in the *Bull.* by Mau (p. 269 *seq.*): one represents the departure of Chryseis = Helbig No. 1308. A male figure stands on the prow of a ship, inviting Chryseis to enter, who is also being helped by a youthful sailor and a young woman. In the background are two warriors. The composition is far superior to the execution. The second painting represents Ulysses and Circe, a subject of which there had previously been but one example in wall paintings (Helbig, No. 1320). Ulysses has just leaped from his seat in great excitement, while before him Circe bends imploringly.

In a room of house 15 two paintings were uncovered, which have also been published on p. 272 of the *Bull.* The first has the well-known scene of Narcissus reclining languidly and gazing sadly at his image in the fountain. In the second is the judgment of Paris: Paris seated and by him a graceful Hermes, while in front of him stand Athena armed, Aphrodite disrobing, and Hera with *stephanê* and sceptre. In shop No. 19, in the back room, is a landscape with the usual sanctuary and sacred tree.

In addition to the notice already published of the discoveries made in 1890 outside the Porta Stabiana (*JOURNAL*, 1890, pp. 228–9; 1889, p. 499), mention should be made of the impression of a body which is of especial importance because almost entirely draped. It is of a young and robust man, lying on his left side, robed in a tunic of some thick stuff which formed heavy folds on his chest, and in short drawers which left his legs

exposed at the knee: on his right foot is a sandal.—*Not. d. Scavi*, 1891, pp. 254–75.

A LARARIUM.—An interesting example of Pompeian art was discovered during November in the house now under process of excavation. It consists of a domestic *lararium* placed in the upper portion of a *cubiculum*. The stucco mouldings and the painted decoration are as fresh as if executed yesterday. A standing figure of Hercules, holding his club in one hand and a vase in the other, fills the wall of the niche. On the ledge were found an elegant statuette of Mercury in gilt bronze, another of a priestess and an amulet representing a dolphin, also in the same material; a Pallas in terracotta, painted in colors, a votive offering of a head, and a model of an altar with the remains of a burnt offering upon it. The portable objects have been removed to the Naples Museum. The height of the *lararium* is about eighteen inches.—*Athenæum*, Nov. 21.

RAVENNA.—**AUGUSTA RAVENNA.**—A Roman sarcophagus unearthed at the church of S. Giorgio has in the centre a Latin inscription: *C. Larnius. Antiochus | Augustae. Ravenn. sibi. et. | C. Larnio. simpliciano | liberto. et. alumno suo | pientissimo. et. karissim. v. p | si quis ante. hanc. arcam | ossuarium. a[li]am arcam (deest)*. It is important for the mention in the second line of the city of Ravenna as *Augusta*, which is the first time such a title has been found with certainty.—*Not. d. Scavi*, 1891, p. 222.

RIMINI.—**ROMAN RUINS AND MOSAICS.**—In the portion of the city between the public fountain and the new casern, have been found traces of numerous Roman constructions which prove the original magnificence of this quarter, in which stood the famous amphitheatre and a temple of Apollo. Remains were found of the pavement laid in 754 U. C. by C. Caesar, the nephew of Augustus; some columns from a large building, perhaps a temple of Mars; a mosaic pavement, the finest yet found in Rimini. This mosaic consisted of a beautiful geometric design of white and black cubes: below it was a second mosaic pavement with a greater variety of colors.—*Not. d. Scavi*, 1891, pp. 191–2.

ROMA.—**EARLY GREEK STATUE OF APOLLON.**—Among the numerous marble fragments found during the past years in the bed of the Tiber, and lying at present in the storehouses of the museum at the Baths of Diocletian, was a nude male torso which, when cleaned of calcareous deposits, appeared, in the uncorroded parts, to be a work of great beauty. The legs of this figure were soon identified, and finally the head; and the whole figure being re-composed is found to be by the hand of a Greek artist slightly earlier than Pheidias. It is of archaic style and represents an Apollon youthful and vigorous, similar in motive to the archaic bronze Apollon found at Pompeii. The left arm and the lower part of the legs are still wanting.—*Not. d. Scavi*, 1891, pp. 287–8.

STATUE BY POLYKLEITOS.—In the via Cavour has been found a marble pedestal of a statue, 80 cent. wide, on which is the inscription ΠΥΘΟΚΛΗΣ·| ΗΛΕΙΟΣ·| [Π]ΕΝΤΑΘΛΟΣ·| [ΠΟ]ΛΥΚΛΕΙΤΟΥ·| [ΑΡΥΕ]ΙΟΥ. This inscription shows that the Roman statue on this base was a copy of the famous statue of the athlete Pythokles by Polykleitos mentioned by Pausanias (vi. 7. 10), whose original inscribed base was found at Olympia in 1879 (Loewy, *Inscr. gr. Bildh.*, No. 91).—*Not. d. Scavi*, 1891, pp. 286-7.

SCULPTURE.—Together with the base of the statue by Polykleitos there was found the colossal marble head of a woman—probably an empress of the second century, which was arranged to be set into a statue or bust.—*Not. d. Scavi*, 1891, p. 286.

STATUE OF VICTORY.—In August, there was hauled up from the Tiber, near the Ponte Sisto, a marble pilaster which belonged to the decoration of the bridge built here under Valens and Valentinian, between 364 and 367. It evidently supported a statue of Victory in whose honor an inscription was engraved. Both monument and inscription are due to the same prefect of Rome, L. Aurelius Avianus Symmachus, who erected at the head of the bridge the bronze statues of Valens and Valentinian. The inscription reads: VICTORIAE AVGVSTA[e | c]OMITI · DOMINORVM | sa]NCTI III IMO · NOSTROR | S. P. Q. R | cv]RANTE · ET · DEDICAN[te | t]AVR AVIANIO SYMMACHO | e]X · PRAEFECTIS · VRBI.

Several pieces of the bronze statues, a wing of the Victory, and the base of the statue of Valens were found.—*Not. d. Scavi*, 1891, pp. 251-2: *Ami des Mon.*, 1891, pp. 375-6.

TOMBS ON THE VIA LABRIANA.—On this site, so well known for the discovery of numerous tombs in late years, a square *cella* has been found cut out of tufa on whose walls were some stucco figures in high relief: on one of them was a chariot driven by a winged Victory, on another a flying Genius. Near it was a small *columbarium*. A number of vases, tiles and sepulchral inscriptions were found in the neighborhood.—*Not. d. Scavi*, 1891, pp. 201-3.

COMMENTARIUM LUDORUM SAECULARIUM.—After thirteen months of expectation, the text of the *Commentarium Ludorum Saecularium*, discovered on the banks of the Tiber September 20, 1890, has been made known. Prof. Theodor Mommsen, who had been invited to illustrate this remarkable document, has fulfilled his task to perfection, and we are left to decide which of the two is the more valuable, the text itself or Mommsen's comments. The edition issued by the Reale Accademia de' Lincei, in vol. i. part III. of the *Monumenti Antichi*, comprises sixty-five double columns of illustrations, ten plates, and two topographical maps.

The work begins with a report of my friend Domenico Marchetti, the architect who superintends in the archæological interest the works of drain-

age and embankment of the Tiber. On September 20, 1890, in excavating for the main sewer on the left bank of the river, between the Ponte S. Angelo and the church of S. Giovanni de' Fiorentini, under the houses Nos. 29-31 in the Via di Civitavecchia, a wall was discovered 30 metres long, 1.70 m. thick, 3 m. high, built with fragments of marble, bricks, tufa, and peperino, embedded half in cement, half in mud. The date of this construction or embankment seems to be the eighth century. As usual in those times, the materials were collected at random from the neighboring ruins, especially from those of the residence of the Quindecimviri Sacris Faciundis, which stood near the modern church of S. Maria in Vallicella, on the borders of the pond called Tarentum. There were still standing at that time two marble pillars, inscribed with the official reports of the celebration of the Ludi Sæculares, once under Augustus, and again under Septimius Severus. Both pillars were carried to the edge of the trench, split into fragments, and hurled into the mass of concrete.

The fragments of the first inscription, which refers to the Ludi celebrated under Augustus in the year 17 B. C., are 8 in number, and 5 of them fit together so as to make a column 3 metres high, containing 168 lines of minute writing. The width of the column is given by lines 96-117, 142-56, which are enclosed at both ends by a ledge or cornice: it amounts to 112 centimetres. The total height of the monument (a sketch of which may be seen in the gold medal struck for the occasion by Lucius Mescinius Rufus, *triumvir monetælis*, in Babelon's *Monn. de la Rép. Rom.*, II. 221) may be estimated at 4 metres, capital and base included.

The fragments of the second inscription—describing the celebration of the Ludi, under Septimius Severus, Caracalla, and Geta, in the year 204—number 105, of which only 63 join together. The name of Geta is erased everywhere, except in the last line of the front page, probably by an oversight of the *marmorarius*.

Several writers have left accounts of the great celebration of the year 17 B. C.: the oracle of the Sibyl referred to by Phlegon; Zosimus, Censorinus, Suetonius, Dion; Augustus himself in the Ancyran biography; the Capitoline Fasti; and Horace, whose *Carmen sæculare*, composed and sung for the occasion (see Didot's edition), has lost none of its popularity after a lapse of 1,900 years. The details given by this official report, while confirming and elucidating the information derived from the sources just mentioned, impart to the description of the wonderful scene a sense of life and actuality that cannot fail to impress the reader.

The Commentarium begins, or rather began (the first lines are missing), by a decree of the Senate, inviting Augustus to take the lead in the celebration and arrange its details. Then follows (ll. 1-23) the letter addressed by Augustus to the college of the Quindecimviri Sacris Faciundis, stating

the minutest particulars of the celebration, the number and quality of the persons who had to take part in it, the dates of days and hours, the number and quality of the victims, *etc.* According to Zosimus these particulars had been suggested to Augustus by Ateius Capito, the leading authority on religious ceremonials. The date of the "manifesto" is lost, but can be indirectly fixed as March 24 of the year 17.

The third document (ll. 24–28) contains a brief report of the sitting of the Quindecemviri, held the same day, in which they decide to give publicity to the imperial manifesto, so that the regulations for the ceremonies should be known to everybody. They select for the performance of the *fruges accipiendæ* four places: namely, the platform of the Capitol in front of Jupiter's Temple; the vestibule of the Temple of Jupiter Tonans; the portico of Apollo's Temple on the Palatine; and that of Diana's Temple on the Aventine.

The next day, March 25, they meet again, but the resolutions passed are not known, because the lines 37–45, which contain the account of the meeting, are in such a fragmentary state as to convey no meaning. The meeting and the following ones were largely attended by the members of the priesthood, not fewer than twenty-one names being registered. And what names! Augustus himself; M. Vipsanius Agrippa; Q. Æmilius Lepidus, consul A. U. 733; C. Asinius Gallus, consul 746; C. Caninius Rebilus, consul 742; C. Sentius Saturninus, consul 735; D. Lælius Balbus, consul 748; and so on.

On May 23, the Senate meets in the Sæpta Julia, the portico built by Agrippa on the west side of the Via Flaminia (between the Caravita and the Palazzo di Venezia), and brings out two decrees connected with the celebration. The first relates to the numerous class of citizens, men and women, who, in spite of the law against celibacy, had remained unmarried between twenty (or twenty-five) and fifty (or sixty) years of age. Among the penalties imposed on them was the prohibition of attending public festivities and state ceremonies. The Senate, considering the extraordinary religious importance of the Ludi Sæculares, which none amongst the living had seen or would see again, takes away the prohibition. The second decree provides for the erection of a monument to commemorate the event. The senators agree that an official report should be drawn and engraved on two pillars, one of bronze, one of marble, to be set up *eo loco ubi ludi futuri sint*, in the place in which the celebration was going to take place. Faculty is given to the treasury officials to provide the necessary funds.

Of the two pillars raised in accordance with this *senatus consultum*, the one cast in bronze is very likely lost forever; the marble pillar is the very one the fragments of which were found on the banks of the Tiber, *eo loco ubi ludi editi sunt*, on September 20, 1890.

The following lines, 64–75, contain the report of another sitting held by the Quindecimviri on the eve of the celebration, viz., on May 25. Every detail is minutely specified, so that there should be no hesitation or confusion. Four places for the distribution of the *suffimenta*, or bounties, are assigned: one on the Aventine, one on the Palatine, two on the Capitol, so as to separate the crowd of applicants; and in order that it should be accomplished *minore molestia*, both of the distributors and of the receivers, three mornings are appointed instead of one, viz., May 26, 27, and 28. Four members of the brotherhood must watch each of the centres of distribution. The dates of May 29, 30, and 31 are fixed for another performance called the *frugum acceptio*, the nature and the meaning of which are not clearly established.

The celebration, in the strict sense of the word, began at the second hour of the night between May 31 and June 1, and lasted three days and three nights. The night ceremonies were performed in a wooden theatre erected for the occasion on the banks of the Tiber at the extreme end of the Campus Martius (between S. Maria in Vallicella and S. Giovanni de' Fiorentini). The day ceremonies were performed twice on the Capitol by the Temple of Jupiter and Juno, and once on the Palatine by the Temple of Apollo. One hundred and ten matrons, above twenty-five years of age, were selected to take part in the procession, and twenty-seven boys and twenty-seven girls of patrician descent (with both parents alive) enlisted to sing the hymn composed expressly by Horace: CARMEN COMPOSUIT Q. HORATIVS FLACCVS, so the report says in line 149. The beautiful canticle was sung twice—once when the pageant proceeded from Apollo's Temple to the Capitol, once on its way back. The accompaniments were played by the orchestra and the trumpeters (*tibicines et fidicines qui sacris publicis præsto sunt*) of the official "Kapelle."

The sacrifices of the first night were offered to the Fates, *Moîpai*; those of the second to the Ilithyïæ; those of the third to the Mother Earth. The day sacrifices belonged to Jupiter, Juno, and Apollo and Diana respectively. The amount of strength displayed by Augustus in these three days and nights is truly remarkable; in spite of his forty-six years of eventful life he never misses attending a ceremony and performing personally the immolation of the victims. The first night he slays nine lambs and nine goats in honor of the Fates, and a bull the following morning in honor of Jupiter. The second night he offers twenty-seven cakes to the Ilithyïæ, and a cow to Juno the morning after. The last night a pregnant sow is sacrificed to the Earth; and twenty-seven cakes are offered to Apollo and Diana at the close of the *triduum*. Agrippa, his friend and adviser, shows less power of endurance; he only appears in the daytime, helping Augustus in addressing the supplications to the gods and immolating the victims.

The text of the supplications is given for each occasion. This is the one addressed to the Fates: "Fates! as it is written in those books [meaning the Sibyllines] for the welfare of the Roman commonwealth, I offer you in sacrifice nine lambs and nine goats (*agnas feminas et capras feminas*), imploring you to augment the power and majesty of the Roman people both at home and abroad; to protect forever the Latin name, and give the Romans incolumity, victory, health, forever. Be merciful and benevolent to the Roman people and their legions, to the college of the Quindecimviri, to me, to my house and family," etc.

The supplication to Juno on the morning of the second day is made by the matrons, 110 in number, led by Augustus himself, and probably by the vestal virgins. In the report of the year 204 two vestals, Numisia Maximilla and Terentia Flavola, are distinctly mentioned as standing near the Empress Julia Domna.

The religious ceremonies were followed by scenic plays and "Latin Secular Games." The play on the first two nights was acted on a temporary wooden stage, no seats being provided for spectators (*in scena, quoui theatrum adiectum non fuit, nullis positis sedilibus*). The "Latin Games" were performed in a wooden theatre provided with seats and erected on the banks of the river. There were also Greek plays given in the theatres of Pompey and Marcellus; races in a temporary hippodrome built in the Campus Trigarius, in which Potitus Messalla and Agrippa acted as starters; and *venationes*, or wild-beast huntings, in the Circus Maximus or Flaminius. The festivities lasted until June 12. During this time, or at all events during the *triduum* of June 1 to 3, the court-houses were closed, and ladies who wore mourning were asked to give up for the occasion that sign of grief.—RODOLFO LANCIANI, in *Athenæum*, Nov. 14.

THE TORLONIA MUSEUM AND GALLERY.—The Italian journals announce the cession of the Torlonia Museum and Gallery to the State. The collection will be the nucleus of the intended National Gallery and Museum of Italy which is to be established in Rome.—*Athenæum*, Jan. 23.

MUSEUMS.—It was expected that the Archæological Museum of the city of Rome in the baths of Diocletian would be opened early this winter. The mosaics, frescoes, and sculpture are at present arranged; the rooms containing the smaller objects are not yet in order. The statue of Apollo found in the Tiber is now being placed on its pedestal. It is of the end of the archaic period. Some additional rooms of the Archæological Museum at the Villa Papa Giulio will shortly be opened to the public.—*Athenæum*, Oct. 24.

TERRACINA.—ROMAN RUINS AND SCULPTURES.—The construction of the new railway-station, north of Terracina, has led to various discoveries of Roman remains. On the very site of the station, was uncovered a singu-

lar building, consisting of a circular structure 2.60 met. in diameter built of calcareous stones, reached by a narrow corridor. In its walls were opened seven niches, three circular and four square. Between the outer wall of the chamber and a thick surrounding wall of octagonal shape there runs a vaulted corridor which has four niches. The chamber belonged originally to the *nymphæum* of some sumptuous villa, and was turned into a tomb.

Among the ruins were found a number of interesting pieces of sculpture. (1) Torso of colossal statue of man in toga, of broad free style and rich drapery. (2) Life-size statue of Venus, headless and without the right arm, left foot, and part of right foot. (3) Statue of a nymph, nude from the waist up, with a shell in front, used for the decoration of a *nymphæum*. It is exactly like the statue of a nymph in the Pio-Clementino Museum (*Cat.*, vol. i, pl. 35). (4) Headless male bust. (5) Female life-size head, of good style, with headdress of the time of the Flavii. (6) Several fine architectural fragments; *etc.*

A piece of water-conduit with the inscription *Reipubl. Tarricines cur. val genialis*, is interesting as confirming the site of the main aqueduct of the city, which brought water from S. Lorenzo Amaseno in the Lepini hills.

Along the *Via del Fiume*, were found two pieces of sculpture: one is a good but much injured replica of the Faun of Praxiteles, without head, arms, or lower limbs; the other is an equally mutilated imperial statue, a little over life-size, with chlamys wound over left arm, and tunic over which is a richly decorated breastplate.—*Not. d. Scavi*, 1891, pp. 232–5.

TODI.—DISCOVERIES IN THE NECROPOLI.—Nearly forty tombs were opened in the necropolis of *Contrada Peschiera*, from the end of March to May 10. The greater part of them had been sacked completely. It is conjectured that this was the work of the antiquarian Monsignore Passeri who in the past century made frequent excavations at Todi, and thereby enriched his museum in Pesaro. The character of the tombs may be judged from the contents of one of the few found intact, which we will here enumerate. Tomb XVI, with wooden coffin, containing: a bronze mirror engraved with two winged genii on horseback, apparently trampling on a fallen man, of excellent style; two gold earrings formed of a band from which hangs a bunch of grapes; a black-figured vase; a small black amphora; a black lachrymatory.

In the *Contrada S. Lucia*, traces of a necropolis were found: a tomb was opened containing a large vase, and near it were found a bronze vase, lances, spear-heads, *etc.*—*Not. d. Scavi*, 1891, pp. 157–8.

VERONA.—ROMAN REMAINS AND SCULPTURE.—During the works undertaken in 1890 and 1891 in Verona to regulate the bed of the Adige and build protecting walls, many ancient objects and ruins of Roman buildings

were brought to light; but the most important discoveries were made in March on the right bank of the river, behind the church of Sta. Anastasia. There, in the bed of the river, numerous blocks of marble were met with which evidently belonged to a bridge that existed here during the Roman period. Such a bridge is recorded as existing up to 1154 when it fell. This bridge was probably called Emilia, because on the road of that name leading from the Julian Alps. The head of the bridge was discovered. There were also found indications of the existence, at this point, of the reservoir of an aqueduct, whose water was carried across the bridge into the city. In the same place as the stone blocks of the bridge, were found many objects, of which the following are a few of the most important.

Works of art.—(1) The finest piece is a bicapital bronze herm, winged, 25 cent. high, representing two female heads joined at the nape of the neck: they appear to be a double herm of Bacchantes, such as are frequent in the Bacchic cycle; the features are badly defaced from lying in the sand. (2) Two very beautiful bronze feet belong to male statues, one colossal, the other life-size. No other fragments of the statues to which they belong have been recovered. (3) Fragments of bronze plates that covered some base or pedestal, beautifully decorated. (4) Shoulder and left arm of a bronze statuette. (5) Statuette of Mercury. (6) Statuette of a winged genius with Phrygian cap. (7) Statuette of Minerva with ægis, crest, etc. (8) Statuette of bearded and ithyphallic Priapus. (9) Equestrian statuette of a Roman warrior, completely armed and in full career. (10) Beautiful bronze group representing a magnificently modelled elephant head with raised proboscis from between whose teeth comes forth a large crested snake whose spiral body forms a sort of hook. (11) Statuette of an agricultural divinity. (12) Bronze wing of a statuette. (13) Parts of a sacred tree of bronze.

There were also found many *utensils* for domestic use and objects of undetermined nature of bronze; also about six hundred coins, nearly all of bronze and badly oxydized. They all belong to the empire, and especially to the lower empire. They were not found together but in groups of ten or a dozen at some distance from each other. On the other hand, 577 coins, nearly all of silver and forming a single treasure, were found under the ruins of the bridge on the left bank. The greater number belong to the emperors of the second and the close of the first century—Vespasian, Domitian. Trajan, Hadrian, Antoninus, Commodus.—*Not. d. Scavi*, 1891, pp. 101–8,

CHRISTIAN ANTIQUITIES OF ITALY.

BERGAMO.—**MORELLI'S COLLECTION OF PAINTINGS.**—The collection of the late Signor Morelli, which he left to the public gallery at Bergamo, will shortly be exhibited there in two rooms, which are being prepared for the purpose. Among the Italian painters represented in this fine collection are

Pisanello, Pesellino, Botticelli, Giovanni Bellini, Borgognone, Beltraffio, Basaiti, Cariani, Montagna, Cavazzola, Moretto, and Moroni; and there are also some good specimens of the Dutch school. Some thirty of the choicest of these pictures have been photographed by Sign. C. Marcozzi, Piazza Durini, Milano.—*Academy*, Sept. 26.

MILANO.—**ADDITIONS TO THE BRERA.**—The Brera at Milan has recently been enriched by fine examples of Paris Bordone and Gaudenzio Ferrari. To these have just been added a Madonna by Sodoma, belonging to his Lionardesque period and of the finest quality; and a magnificent portrait, by Titian, of Count Antonio of Porcia.—*Academy*, Sept. 26.

NAPOLI.—**THE PRESERVATION OF THE CHAPEL OF S. GIOVANNI.**—The commission for the preservation of monuments is studying how to preserve the chapel of S. Giovanni, in the via dei Mercanti, with crypt of S. Aspreno below it. The crypt is a short and low chamber covered with a tunnel-vault, and has an ancient altar; it is supposed to have been used for the worship of Mithras. It was also, according to tradition, the dwelling-place of S. Asprenus, first bishop of Naples, in the first century. On its walls are remains of early-Christian frescoes. In the chapel above is a Greek inscription on a marble balustrade carved with geometric designs, flowers, and animals in Byzantine style: the inscription gives as founders the names of *Campolos* and *Constantina*. It is a work of the ninth century, and evidently refers to the chapel and not to the crypt.—*Not.d.Scavi*, 1891, pp. 236–7.

ROMA.—**HOUSE OF SS. JOHN AND PAUL.**—PADRE GERMANO, continuing his excavations under the church of SS. Giovanni e Paolo, has cleared a part of the inner vestibule on the street of the same name. On the lower floor of this side of the house are six great arches or arched passages which were closed up; to each one correspond a line of two chambers in the direction of the *atrium* or *compluvium* not yet cleared. The vestibule was originally in the form of an unbroken portico, but, in the fourth century, it was cut up by walls into six small chambers, three of which have been cleared. When, in the fifth century, the lower part of the house was abandoned and filled up, this vestibule alone was left accessible, and within it was established an oratory which was reached by one of the six doors in the arcades, the only one not walled up at that time. It remained thus accessible until the time of the great restoration of the basilica shortly after 1000 A. D. Thus we can explain the presence of the religious paintings that decorate all the walls of each of these compartments. The best and the larger number of these paintings are lost, only three remaining in good condition. The first, representing the Saviour, has been already described (*Scavi*, 1890, p. 79). The second figures the Crucifixion. The figure of Christ is draped in the *colobium*, and by his side are the Virgin, Mary Magdalen, and St.

John. Longinus is present with his lance, and another soldier with the reed and the sponge. Above these figures are four small winged angels. The scene occupies a space of 1.75 by 1.20 metres, and is rather rudely treated, although the faces of the ten figures are very well drawn. The date appears to be about the ninth century. Slightly under this picture is another representing the three soldiers casting lots for the vesture; the subject is indicated by an inscription placed above it in white letters on a black ground: SVPER BESTEM MEAM MISERVNT | SORTEM. The figures are standing, lance in hand, in front of a circular object which may be the *tabula lusoria* or the tunic itself.

On the neighboring wall, in an oval niche is represented the dead Saviour entirely surrounded by a glory. A kind of tower appears to indicate the walls of a city, and a door near the niche, the entrance to the tomb. Below, on the same wall, is represented Christ descending into Limbo, in a manner similar to the painting at S. Clemente, only less complete. Only two letters remain of the inscription relating to it. Fragments of frescoes of similar style remain here and there on three other walls but so badly injured as to be unrecognizable.—*Not. d. Scavi*, 1891, pp. 161-2.

EXTENSION OF THE VATICAN LIBRARY.—Under the great hall of the Vatican Library, there is another of the same size that has hitherto been the Armoury. Its contents have now been removed; and in it have been placed about 185,000 printed books, which formerly filled the Borgia and other rooms situated at a considerable distance from the reading room. For the convenience of readers in the Library and those admitted to the Vatican Archives, one section of the new hall is filled with books of reference, those selected being such as serve the purpose of scholars working at mss. The plan of the reference library resembles that of the ms. department at Paris, but is of a more international character, and includes all publications sent by foreign governments, learned societies, and literary clubs. The Pope has specially intended that the books in the reference library should represent the literature of all nations, and that students coming to work at the Vatican should find there the publications of their own countries.

Besides these there are (1) the Mai collection, (2) the old papal library of printed books, (3) the Palatine library from Heidelberg, (4) the Fulvio Orsini collection, (5) that of Cardinal Zelada, (6) that of Capponi (containing Italian literature), (7) that of Cicognara (books on the history of art), (8) all subsequent historical collections down to that of Ruland, librarian of Würzburg.—*Academy*, Aug. 1.

SARDINIA.

NORA.—PUNIC NECROPOLIS.—It was owing to the violent ravages of stormy waves on the coast near the site of the ancient Nora that the most ancient part of the necropolis of this city has been brought to light. Hitherto only remains of the Roman period had been found, but the waters turned up some Punic *stelæ*, and seemed to show exactly where to investigate. A thorough excavation was made over the entire surface of the early necropolis. The result was somewhat monotonous, consisting largely of terracotta urns, with swelling body, with a slightly inclined neck, and two handles in the form of half-rings. These urns, while varying in size, are of the same ordinary reddish earth and the same shape: they were always closed by a reversed cover, and contained burnt bones. The urns, placed side by side, occupied a small space underneath numerous *stelæ* inclined in the midst of the sand that surrounded them. The number of urns was about 220, many of them in fragments; and the *stelæ* numbered 153, so that the greater number of the urns had a corresponding *stela*. Seven of the urns were of a different shape, resembling a truncated cone, with larger aperture, depressed and lengthened handles: their funeral contents was of a special character, including bones and heads of animals. The whole excavation was made in a bed of compact reddish sand, a virgin soil above which a gradual accumulation of sand took place.

At about forty metres east of the necropolis, still near the shore, was found an area of semicircular shape with traces of long and repeated action of fire, which was probably the place of cremation.

The *stelæ* are cut out of the local sandstone, and, while some of them are rude, many are carved with masterly hand and have artistic value, all the greater considering the ill-adaptability of the stone. The greater number have the goddess Tanit in the usual form of the sacred cone, with or without the crescent, with globe or in human shape. On many of them are figures of Egyptian or Oriental style, and Greek influence is visible in some. Some of them bear inscriptions that may throw light on the period of the necropolis.

While similar *stelæ* are met with in other *necropoli* of Sardinia, the funeral objects found in some of the urns is singular. They consist of tripods of various dimensions (varying from 75 millim. to 25 cent.) surmounted by a disk; small receptacles, sometimes in the form of truncated cones, sometimes of spherical caps; little pans; palettes with long handles; small lamps and knives. All these objects are of lead, covered with heavy patina. Among other objects found were three Punic coins, one with a palm-tree, another with the head of Astarte; three Roman coins; six vases, one of which had a human face, of archaic style; a terracotta head of Ceres; the

neck of a large vase with black lustre, on which a Phœnician inscription is scratched showing it to be dedicated "*to the Lady Tanit, face of Baal, (by) Ger, the son of*" Two small headless statuettes were found, one somewhat rude, rather Egyptian in style, the other, stamped, representing Artemis at rest with a doe by her side, a delicate graceful Greek work.—*Not. d. Scavi*, 1891, pp. 299–302.

SICILY.

SICILIAN-GREEK NUMISMATICS.—A. J. Evans read before the Numismatic Society of London on Oct. 15 and Nov. 19 a paper on *Syracusan "Medallions" and their Engravers in the Light of Recent Finds*. The coinage of these noble dekadrachms, or fifty litra pieces, originally derived from the offerings of the Carthaginians to Gelon's wife Dāmaretê after their crushing defeat at Himera in 480 B. C., was renewed towards the close of the fifth century B. C., in a still more splendid style. These coins, the hitherto known examples of which bear the signatures of the two artists Kimôn and Evainetos, had from Winckelmann's time onwards been regarded as the masterpieces of the art of coin-engraving. Much, however, yet remained to be elucidated as to their exact dates and occasion. Mr. Evans described a remarkable discovery made on the site of the ancient Inessa (now Santa Maria di Licodia), on a spur of Mount Etna, of a vessel containing nearly seventy of these "medallions," in addition to other Sicilian-Greek silver coins of lesser denominations. The pot in which they were contained lay beneath a layer of lava, but many of the coins were nevertheless in the most brilliant condition. Among them, besides hitherto unpublished coins of Messana and Selinûs, was a new dekadrachm by Evainetos, exhibiting his signature in full, and probably representing the latest work of that engraver. The great prize of the hoard was, however, a "medallion" by a new artist, traces of whose signature are visible in a monogrammatic form on the reverse, and whose work transcends in delicacy and beauty anything hitherto known in this branch of art. The obverse exhibits the head of Persephonê or Dêmêtêr Chloê crowned with the earless barley-spray of spring; and, as compared with other coins presenting this type, her hair has here acquired a new and luxuriant development. The author recognized in this head the prototype of Evainetos' Kore, from which it is distinguished by its greater severity of profile, the formation of the eyes, and various early characteristics. The reverse of the new "medallion" is equally remarkable. As on other dekadrachms, we see here the quadriga crowned by Nikê, and the panoply ranged on steps below, but they appear in a new and grander aspect. The movement of the horses is rhythmic and harmonious, and very different from the more sensational scheme of Evainetos. Behind them is seen the angle of a monument, perhaps representing the

judges' stand, from which Nikê flies. The inscription ΑΘΑΑ is placed in large letters above the shield in the exergue. The issue of this "medallion" and the earliest of the fellow coins by Kimôn was connected with the Athenian overthrow of 413 and the institution of the "Asinarian Games." From the evidence of recent finds and the author's typological studies it would further be shown that the whole chronological arrangement of the Syracusan coin-types during the last quarter of the fifth, and the first half of the fourth century B. C., required radical revision, and that in particular a surprising monetary gap occurs during the Dionysian period, attributable to the desperate financial expedients of Dionysios I. He showed the importance of certain coins struck at Segesta at the time of the Athenian alliance, and at Motya and Panormos at the date of the Carthaginian expedition of 409 B. C., in their bearing on the chronology of the early medallions by Kimôn. It appeared, moreover, that the masterpiece of that artist exhibiting the facing head of Arethusa was imitated at Himera before the close of the same year. For Kimôn himself he claimed a Campanian connection, and pointed out evidences of Campanian influence and traditions on the style and ornaments of his later Syracusan designs. Mr. Evans traced the influence of the rival artist Evainetos in a series of imitations of his famous head of Korê on the later Greek coinages of Sicily and the mother country, as well as on those of Carthage and the Siculo-Punic cities. From Rhoda and Emporiai on the Spanish coast debased copies of Evainetos' design were propagated through the Iberic and Armorican tribes, and found their last degeneration in certain ancient British types that ranged from Plymouth to Oxford. It was further shown that silver cups adorned with the medallions of this artist were imitated in clay by the Capuan potters, and a recently discovered signet gem was described, representing the same official type of Herakles and the lion which occurs on Syracusan gold staters engraved by Evainetos, and which both from its style and subject must be regarded as a work of the same engraver. The historic occasion of the earlier "medallions" known as Dâmareteia, from Gelon's consort, was next discussed, and various evidence brought forward connecting the revival of this silver dekadrachm issue with the Assinarian games instituted to commemorate the defeat of the Athenians. In conclusion it was shown that the chronological data supplied by Mr. Evans's researches pointed to the breaking off of the tetradrachm coinage at Syracuse at the beginning of the Dionysian era, and evidence was further adduced for believing that the earliest Syracusan *Pegasi* were coined in alliance with the Leontines, at the time of Dion's expedition in 357 B. C.—*Athenæum*, Oct. 24; Nov. 28.

EARLY NECROPOLI.—The excavations made by the Italian Government in the Hellenic and prehistoric necropolises in the neighborhood of Syracuse

have brought to light a large number of tombs and a great quantity of grave-goods of various kinds, especially ornamented pottery of most primitive forms, bronzes (amongst which are swords dagger-shaped like those of Mykenai), and bone ornaments of a peculiar character. Some tombs were found with the entrance or *dromos* closed by a stone slab with ornamentation sculptured in relief in a strange exotic style, perhaps Phœnician. But the most remarkable discovery now made here in Eastern Sicily is of earth-works and objects presenting the genuine Mycenæan type, which prove that the so-called Mycenæan culture extended to this island. Dr. Orsi, director of the works, is preparing his report for immediate publication.—*Athenæum*, Aug. 29.

SYRACUSE.—GREEK VASE.—A red-figured Greek vase of the fourth century B. C. has been discovered in the necropolis of Fusco. This fact is of interest, because it is the first discovery of a red-figured vase in this vast necropolis. It is a *kalpis* of excellent style, and represents a combat of a warrior and youth with an Amazon.—*Not. d. Scavi*, 1891, p. 298.

FRANCE.

ARLES.—ROMAN SARCOPHAGUS.—In June, 1891, a fine Roman sarcophagus was unearthed at Trinquetailles, a suburb of Arles, at a spot which appears to have formed part of the ancient necropolis, destroyed by the river Rhone. It has been placed in the museum of Arles, together with the top of another sarcophagus found at the same time. All four of the sides are covered with reliefs with hunting-scenes ending in the death of the hero from the onslaught of a boar. The art of the reliefs is excellent, and belongs probably to the second century.—*Ami des Mon.*, 1891, pp. 364–72.

GROZON.—RELIC OF ST. AKINDYNOS.—At a recent meeting of the *Académie des Inscriptions*, M. Gustave Schlumberger exhibited a relic which has a curious history. It is the fragment of a left parietal bone, enclosed in a plaque of silver, which is encised with the figure and the name (in Greek letters) of Saint Akindynos, who was martyred at Nikomedeia in the reign of Diocletian. In 1200, this relic was preserved at Constantinople in the church of SS. Cosmo and Damian; for it is mentioned as being there at that time by a Russian pilgrim, the archbishop of Novgorod. Four years later Constantinople was sacked by the returning crusaders, and this relic was presented to the abbey of Rosières, in the Jura. An inventory of the treasures of this abbey, made in 1714, mentions both the bone and its silver setting. In 1791, when all the treasures of the abbey were dispersed, the relic disappeared. But quite recently, the Abbé Guichard, while making some archæological excavations at Grozon, near Rosières, found the bone of Saint Akindynos, still enclosed within its silver plaque, in a heap of wood-ashes left by some salt-workers.—*Athenæum*, Nov. 14.

PARIS.—LOUVRE.—New Hall.—A new hall, containing Jewish antiquities, will shortly be opened on the ground-floor of the Louvre, and in a line with the great Chaldeo-Assyrian Gallery and the Hall of Phœnician Antiquities. This addition is spacious enough to contain all those relics of the ancient people in which the Louvre is very rich. In the same museum the authorities have installed the fine mosaic found by M. Renan in 1863 at the Church of St. Christopher, Kabr-Hiram, near Tyre.—*Athenæum*, Aug. 29.

Additions to Collections.—Among the most beautiful and interesting additions lately made to the Louvre are five *répétitions en stuc polychrome* of Italian sculptures of the fifteenth century, of the kind to which, as existing in the same museum, we called attention some two years ago as terracotta medallions with designs in relief, painted in rich colors, silvered and gilt, and specimens of the most charming spirit and rarest skill. Like the latter, four of the new examples represent the Virgin and Child; the fifth, and finest of all of them, is the statuette, three-quarters of the size of life, of an adolescent youth, who is in the act of presenting a garland.

A statuette in bronze of Bacchus, said to have been found on the acropolis of Athens, attributed to Praxiteles, and formerly in the possession of Photiades Pasha, Governor of Krete, has been acquired by the Louvre from Signor Giulio Sambon.—*Athenæum*, Jan. 23.

TOWER OF JEAN SANS PEUR.—The Society for Protecting Ancient Buildings will take small comfort in the announcement that the architect of the City of Paris has received instructions to prepare a scheme for the complete restoration of the tower of Jean sans Peur in that city.—*Athenæum*, Jan. 23.

SWITZERLAND.

AVENCHES.—The excavations at Avenches (Aventicum), in Canton Vaud, will probably be continued this winter, with a view to laying bare the whole remains of the ancient theatre. An application has been made to the Government for funds.—*Athenæum*, Sept. 26.

SCHAFFHAUSEN.—PREHISTORIC SETTLEMENT.—In the neighborhood of Schaffhausen, close by the three rocks known as the *Schweizersbild*, Dr. Rüsch has discovered a very extensive human settlement belonging to the stone age, which is now being laid bare under his supervision. The settlement is in a rocky niche about 13 met. high and 37 m. long, and is the first of that period which has been discovered in Switzerland which is not in connection with a cavern. The overhanging rocks offered a roof as protection against the weather. Dr. Rüsch has found here an immense quantity of flint knives, chisels, and lance-heads, bones of the reindeer, roe, stag, hare, cave-bear, and other animals; also human bones, needles, and the beginnings of drawings.—*Athenæum*, Oct. 31.

GERMANY.

AHRWEILER.—ROMAN GRAVES.—Four new graves have been unearthed by the Provincial Museum. They consisted of stone and tile coffers in simple earth-graves. All showed that the bodies had been burned. One grave contained two artistic glass vases; another a huge wine-jug surrounded by sixteen pitchers, cups, and plates. A notable find was a small lamp in the form of two juxtaposed feet, with the artist's name signed on the soles of the sandals.—*Westd. Korr.*, x. 55, from *Köln. Ztg.*

BITBURG.—ROMAN INSCRIPTION.—In 1890 was found an inscription which may be thus restored:

In h(onorem) d(omus) d(ivinae) num(inibus) augg(ustorum) fara[bu]- | rem exaedicaverunt suo i[np]- | endio iuniores vici hic cos[i]- | stentes loco sibi c[on]cesso | et donato a vikan[is b]ede- | nsibu[s] dedicatum effec- | tum I. . . idus iulias imp(eratore) d(omino) | [n(ostro) philippo] aug(usto) et Titiano c[o(n)s(ulibus) | cur(atoribus) . . ti[o] et secundo s[e]c[ur]o.

Bitburg was originally called *beda vicus*, then *castrum bedense*. This inscription is the earliest document containing the name *Beda*.—**WALLENBORN**, in *Westd. Korr.*, x. 44.

BLANKENHEIM.—MEROVINGIAN BURIAL-GROUND.—For several months excavations have been made in Nettersheim of a Merovingian burial-ground. More than 100 graves have been opened. In 37 were found only the skeletons. The remaining graves contained also each an urn. In the men's graves were laid at the right of the body an iron sword and battle-axe, at the left a dagger and occasionally a small knife. Sometimes a coin of gold or silver was laid under the chin. By the right arm was a cup of thin white or green glass. In the graves of the women, besides the urn, were found rings, necklaces, hair pins and combs of bronze, glass and earthen vases.—*Köln. Ztg.*, in *Westd. Korr.*, x. 112.

BONN.—In digging, probably in Bonn, was found the following oculist inscription:

1. *G(ai) Mont(i) Iuen(is) dialepid(os) ad asp(ritudinem)*. (A known recipe.)

2. *G(ai) M(onti) Iuenis spodiace(um) ad l(ippitudinem)*. To *spodiaceum* add *collyrium*, Scribonius, 24.

3. *G(ai) Monti Iuven(is) euodes ad cla(ritatem)*. Cf. *crocodes*, Klein No. 122. [Scribonius, 26.]

4. *Μαρκιανῶν κυκνάρια*. [Galen xiv p. 765 Kühn: τὰ μὲν γὰρ πρὸς ἀρχομένας ὀφθαλμίας ἀρμόζει, ὡς τὰ διὰ γλαυκίου καὶ τὰ διὰ κρόκου καὶ τὰ κυκνάρια.]—**S. SEY**, in *Westd. Korr.*, x. 27.

DÜSSELDORF.—In the Kaiserhain near Düsseldorf lies a Germanic burial-ground. On the site excavated a few years ago by the Historical

Society of Düsseldorf the city Government has recently unearthed more slender urns filled with bone ashes.—C. KOENEN, in *Westd. Korr.*, x. 25.

EHRANG (near Trier).—Not far from the spot where the Roman stone-sculptures were found other remains have been discovered, consisting of architectural fragments and numerous graves, both Roman and Merovingian, and a subterranean sepulchral chamber. There were graves of children and adults, some with and others without other contents than the bones or ashes of the departed. The subterranean chamber is 5.73 m. long and 4.10 broad. At one end is a niche for a statue. The chamber was apparently entered by means of a ladder or wooden steps, as there is no arrangement for a stone stairway. The walls were stuccoed and painted, but not in fresco. The coloring was arranged in three superposed sections. The lowest 50 cm. high in reddish-brown was painted to represent panelling. The middle section was divided into squares and rectangles which contained circles, crosses and lozenges. The colors here used were red-brown, green, black, yellow and red, and the decoration imitated marble incrustation. The upper section was a decorated frieze, but has almost entirely disappeared. In the centre of the room were two stone blocks, with sunken cavities in which posts to support the roof or a partition-wall might have been placed. Fragments of a statue of a young man were found in this chamber. Similar subterranean sepulchral chambers are not common in the Rhine country. They are found at Weyden near Köln and at St. Matthias and Schweich near Trier. Coins found in these tombs date from 260–340. The tombs themselves are probably not earlier than the third century. A circular enclosure adjoining the tomb seems to have been used as a resting place for mourners and for funerary feasts.

SCULPTURES.—Near the site where the fragment of an equestrian group was found in 1890, excavations have been continued under Herr Ebertz. Here was found: 1. A sandstone group of a god riding a horse over a giant. The somewhat damaged group measures 86 cm. in height. The god has a beard, is without covering for the head, wears the lorica, tunic and garment like a chlamys. The giant shows his teeth at a foe not represented. 2. A second similar group represents a German or Celt overriding a giant. The broad-headed, beardless rider is clad in a close-fitting upper garment. The saddle is of peculiar construction with a high support in front and smaller one behind. The giant is youthful and beardless. 3. A sandstone altar was also discovered, on the four sides of which are sculptured Ceres, Mercury, Hercules and Minerva. The association of Ceres and Hercules is important, as they appear on other altars from the same region in connection with other divinities. 4. Several architectural fragments were found, which probably belonged to the altar.—HETTNER, in *Westd. Korr.*, x. 26, 70, 71.

FRANKFURT.—ROMAN RUINS AT DORTELWEIL.—That the ruins here were not a military station but a "villa," as was suspected by Böhmer in 1842, is now established. The substantial walls, the arrangements for heating, the remains of wall-decoration indicate a stately mansion, the plan of which corresponds to the *villa rustica* described by Vitruvius. The scarcity of metal objects, pottery and especially of stamped sherds indicates that the house was used by the conquerors and gradually fell into ruins. The termination *weil* seems to be a reminiscence of the ancient *villa*.—Dr. WOLFF, in *Westd. Korr.*, x. 52.

ROMAN INSCRIPTION.—On a large brick found in the ruins of a Roman villa north of Dortelweil is inscribed in uncial characters *mittet* (*mittit*) *Mattose* (*Mattosae*) *salutem, coiugi carisime* (*coniugi carissimae*) *et . otat do usque at (ad) te*. By means of Ovid, *Heroiden* 13, 1-2, *Mittet et optat amans, quo mittitur, ire salutem* | *Haemonis Haemonio Laodamia viro*, the inscription may be completed to read *et optat eam* (*i. e., salutem*) *ire aliquando usque ad te* (*i. e., Mattosa*). Another instance of a similar greeting making use of the third and second person is found in *CIL*, iv. 2015.—A. RIESE, in *Westd. Korr.*, x. 69.

HEDDERNHEIM.—A relief of Aeon, often found in Mithraic representations, having been discovered in Heddernheim and sold to a foreigner, Dr. Georg Wolff makes an appeal for a systematic investigation of this ancient site of Mithraic worship.—*Westd. Korr.*, x. 4.

KARLSRUHE.—EXCAVATION OF TWO TUMULI NEAR SALEM.—In the Hartwald, a half-hour's walk west of Salem, there is a group of 20 mounds. Eight were excavated in 1830 and 1834 and one in 1878. A tenth has been recently excavated, and has revealed the following: a large iron sword, a fibula, a large neck-ring, two beautifully decorated urns, and other small objects. The mound apparently dates from 500 B. C. A second mound, which had been excavated in earlier days, was reëxamined. A new burial was discovered, that of a child of 13 or 15 years. Remnants of a Bernstein pearl necklace, a fibula, armlet, buckle, and pottery were found.

ROMAN BUILDING NEAR WALDSHUT.—The Roman ruins near Waldshut prove to be remains of a large house, of which there have been cleared a long passage and eight rooms. One of these was a bath-room. Several of the rooms were heated by hypokaustal apparatus. Fragments of stucco show wall-paintings of floral and geometrical design on white ground.—E. WAGNER, in *Karlsruher Ztg.*: *Westd. Korr.*, x. 83, 110.

KÖSCHING (NEAR INGOLSTADT).—CAMP AND ROMAN BUILDINGS.—The old Roman fortification stood in the southwestern part of Kösching. The church and burial-ground occupy the place of the Prætorium. The camp measured about 250 by 200 m. Outside of the camp was a building provided with heating apparatus, baths, *etc.* The rough walls were covered

with stucco. Some at least of the rooms were vaulted. The precise purpose of the building is difficult to define. It might have served judicial purposes and was adapted also for dwelling. The construction of the walls seems to date from the second century.—T. FINK, in *Westd. Korr.*, x. 75.

MAINZ.—The dredging of the Rhine between the Ingelheimer and Petersane has brought to light a number of small bronze objects, chiefly fibulæ of the La Tène type, and bars the significance of which is unknown.—L. LINDENSCHMIT, in *Westd. Korr.*, x. 21.

MANNHEIM.—Mounds in the woodlands of Freiherr von Gemmingen at Rappenu. The investigations made by the local archæological society in connection with the Karlsruhe society have been confined to the six mounds of the western group. The character of the objects found exhibits an interesting mixture of the so-called Hallstatt and La Tène types of culture.—K. BAUMANN, in *Westd. Korr.*, x. 2.

NEUSS.—**ROMAN CAMP.**—The excavations of the *castra stativa* at *Novesium* by the Provincial Museum of Bonn have been most successful. The excavations extended along the right side of the *praetentura*. This is divided into three sections. In the outermost are 202 wall-bound spaces for tents and baggage. In the middle section were three buildings apparently belonging to the *scamnum tribunorum praelectorumque*. In the southern section is a wall-bound quadrangular space apparently the *schola legionis*.—Köln. *Ztg.*, in *Westd. Korr.*, x. 114.

PFALZ.—**EXCAVATIONS ON THE HEIDENBURG NEAR KREIMBACH.**—The foundations of a late-Roman gate-tower have been laid bare. From this extend walls to the southwest and northwest. Amongst the smaller finds was the iron staff of a standard. Fragments of a cornice, a sarcophagus-cover, several stelæ carved in relief, besides small objects of iron, bronze, glass and pottery were found. There is no trace of mediæval remains. Coins of Gallienus, Tetricus and Aurelianus point to the construction of the fort in the third century. From the fact that gravestones were used it would appear that urgent necessity compelled a speedy construction. Such a time was when under Gallienus and Tetricus the Romans lost the right bank of the Rhine and had to speedily protect the left.

ROMAN ROADWAYS.—In following the Roman road from the Rhine westward over the Hartgebirge it has been established that the old Roman road led on the east slope of the watershed from the old station on Murrnurnichtviel almost in the line of the present road to Becherskopf, thence to the ruins of the hunting castle Schaudichnichtum and up and down hill to Lambertskreuz, and on to Nadenbrunnen and to Drachenfels, where Siegfried fought the dragon. Its continuation to Weidenstrat and Speyerbach awaits investigation.

ROMAN ROADS TO METZ.—The investigation of the Roman road from Dürkheim and Neustadt into the mountains has resulted in fixing the direction of the road from Lopodunum (=Ladenburg) on the right bank of the Rhine to Oggersheim on the left bank, and on to Ruchheim, Ellerstadt and Dürkheim. In the mountain the road follows the water-way, is often steep and does not exceed three metres in width. Roman coins, pottery and tools were found. The road Neustadt—Kalmit—Schänzel was partially investigated. Both roads lead by the Saar to Divodurum=Metz.

STONE IMPLEMENTS FROM SOUTHERN PFALZ.—Hitherto the opinion has prevailed that the stone implements from this region were made from Alpine rocks. This is not universally the case, as nine out of ten stone implements found at Dörrenbach, Böllenborn, Reisdorf, Waldleiningen, Blankenborn and Bruchweiler are made of diorite precisely like that found in the Silz valley. Similar implements have been found in the Silz valley, showing that in the neolithic period they were manufactured in this region.

COLUMNAR BOUNDARY-STONE.—Northwest from Donnersberg on the left bank of the Alsenz is the Stahlberg. Here is found a large conical-pointed column, 3.60 m. long with a diameter of 1 m. at the base. It was probably a boundary-stone, antedating the Alemanni. At Niederkirchen was found a greenish stone axe, belonging to the late stone age.—Dr. C. MEHLIS, in *Westd. Korr.*, x. 84, 53, 22, 78, 23.

RHEIMPFALZ.—ROMAN ROADS.—The Roman roads in the Southern Palatinate are either parallel to the Rhine or at right angles to it. Parallel to the Rhine are the two roads: (1) the *via militaris* which unites Rheinzabern, Gernersheim, Speyer, Altrip and Worms; and (2) the mountain road from Upper Alsace to Mainz. The cross roads uniting these two roads have been hitherto unknown. Recent investigations have shown a number of roads leading from the five towns above mentioned across to the mountain road.—Dr. C. MEHLIS, in *Westd. Korr.*, x. 111.

ROTTWEIL.—THE ROMAN CAMPS AT ROTTWEIL AND AT HOCHMANERN.—Recent excavations at Rottweil have resulted in following the line of the walls surrounding the camp. Three separate periods of construction have been determined. At Hochmanern a Roman fortress has been discovered. Here also three successive periods of construction have been determined. The excavations here described were carried on during 1888, 1889, and 1890 in continuation of former investigations.—HÖLDER, in *W. Korr.*, x. 77.

SCHRIESHEIM (NEAR HEIDELBERG).—ROMAN BUILDING.—The erecting of a new building near the station at Schriesheim led to the discovery of the cellar of a Roman building. The stuccoed walls contained niches; in the middle of the room was a stone table. A small relief of a seated matron with fruit-basket in her lap was also found. These are to be published by the Archæological Society of Mannheim.—K. BAUMANN, in *W. Korr.*, x. 19.

STUTTGART.—THE ROMAN FORT ON THE SCHIERENHOF NEAR SWABIAN GMUND.—In 1886 a corner tower of the fort was discovered and partially excavated. Later excavations show the existence of similar towers at two of the remaining corners. The fourth corner being occupied by a dwelling house could not be examined. The *Praetorium*, the *Porta dextra* and *Porta decumana* have been set free. Fragments of pottery and letters and implements of bronze were found near the *Praetorium* and *Porta dextra*.—STEIMLE, in *Westd. Korr.*, x. 74.

ROMAN ROADS.—The condition of the investigation concerning the Roman roads in southwestern Germany is reported by K. Miller. 1.—The investigations in upper Suabia came to an end in 1884 for lack of funds. 2.—Since 1886 considerable portions of the Roman road from Bregenz to Feldkirch have been discovered under the present highway. Further investigation is expected from Baron v. Lochner in Lindau. 3.—Since 1887 extensive investigations have been made in Baden at the expense of the grand duchy, extending to the region south of the Kinzigthal. Here the condition of the road for a long distance has been recovered. 4.—Excavations have been made since 1887 in Schaffhausen with results corresponding to those in Baden. 5.—The renewal of the governmental description of Württemberg has begun with the investigation of the connection of the Neckar-road, established between Nürtingen and Tübingen, and the valley of the Danube, lying on the other side of the rugged Alp. 6.—The roads between Neckar, Rems and Limes have been investigated by two university graduates with successful results. Several roads were found leading straight to Limes, but no made road from Pfahlbronn to Mainhardt. A broad well-constructed road was found from Löwenstein to Mainhardt and through Limes to Hall. From Hall a Roman road was found leading over the Einkorn in the direction of Aalen and a second towards Crailsheim.—*Westd. Korr.*, x. 1.

TRIER.—Recently a marble tablet has been found in Trier, bearing an inscription which reads:—*Deae Icovel*(launae) *M. Primius Alpicus v*(otum) *s*(olvit) *l*(ibens) *m*(erito). The Celtic goddess *Icovellauna* is known by a number of inscriptions. She seems to be a healing divinity as well as a fountain nymph. Dedicatory tablets of bronze as small as this are common, in marble they are rare.—HETTNER, in *Westd. Korr.*, x. 54.

VILLINGEN.—**ADDITIONS TO THE DESCRIPTION OF A GRAVE.**—This grave was described in *Wd. Korr.*, ix. 159. The various bones make up the skeleton of a man and a little pig. Wooden fragments of a chariot were discovered, showing a tire thickly set and protected with square-headed nails. Bronze buttons for the decoration of horses were also found.—K. SHUMACHER, in *Westd. Korr.*, x. 13.

WITTEKINDSBURG (NEAR RULLE).—The excavations at Wittekindsburg under Dr. Schuchhardt bring to light a Roman fortified camp. The western entrance is well preserved. At the southwestern angle is a round tower, at the northeastern a square tower, at the other angles no towers but only a curving of the wall. The wall was built of calcareous stone regularly laid. The plan of the camp is irregular and determined by the character of the hill-top. Measurements as well as the construction indicate the Roman character of this stationary camp. This region has been regarded by recent historians as a battleground between Romans and Germans.—*Westd. Korr.*, x. 15.

WORMS.—GRAVES OF THE BRONZE AGE AT METTENHEIM.—These graves are of importance for the very sound condition of the skeletons which have been discovered. A very interesting foot-ring of bronze indicates a date earlier than the Hallstatt-period.—Dr. KOSHL, in *Westd. Korr.*, x. 43.

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SUMMARIES OF PERIODICALS.

JAHRBUCH D. K. DEUT. ARCHÄOLOGISCHEN INSTITUTS. Vol. VI. No. 4. 1891.—H. WINNEFELD, *Tusci and Laurentinum of Pliny the Younger* (2 cuts). Pliny's descriptions of his country-seat in the upper valley of the Tiber and his suburban villa near Laurentum are discussed in connection with Hadrian's villa at Tivoli and Vitruvius' brief mention of villas (vi. 8, 9). Plans of Pliny's villas are given, differing in some respects from those of previous investigators.—A. MICHAELIS, *Roman Sketch-books of northern artists of the XVI century. II. An Engraving by Hieronymus Kock (The Collection della Valle)* (full-page cut). A cut is published and described bearing the signature *Kock exc. 1533*, and the legend *Haec visuntur Romae, in horto Card. a Valle, eius beneficio, ex antiquitatis reliquiis ibidem conservata*. Perhaps this may be taken from a sketch by Heemskerck. It represents the upper court or garden of the Valle-Capranica palace with its antiques. The family Della Valle and its collections of antiquities are traced from Lellus in the latter part of the fourteenth century to Paolo, Domenico, and Ottaviano Capranica, who sold the collections in 1584 to Cardinal Ferdinando de' Medici. A descriptive catalogue of the collections is given, embracing 200 numbers.—F. STUDNICZKA, *Monument of the victory at Marathon* (3 cuts). Fragments of a horse and rider (*Museums of Athens*, II, pl. 12, 'Εφημ. 'Αρχ. 1887, 2) discovered near the Erechtheion in 1886 are here published and discussed. The rider is a Persian holding his bow in his right hand, the reins in his left. Colors were freely used as was also bronze. The Miltiades-plate in the Ashmolean Museum (Klein, *Vasen mit Lieblings-inschriften*, title vignette) is compared. This group is a monument of the battle of Marathon, and was destroyed by the Persians. It is therefore pretty exactly dated. It probably belonged to a larger group, and may be a work of the Aigenetan school of Kalon and Onatas.—P. HARTWIG, *Two Vase-paintings (Schalenbilder) of Epiktetos* (pl. 5; 2 cuts). Two vase-paintings are published and discussed. One is in the Museo Torlonia in Rome (Klein, *Meistersign.*, p. 105, No. 13), the other in the Peabody Institute in Baltimore (Hartwig, *Röm. Mitth.*, II, p. 167). Both are inscribed ΕΠΙΚΤΕΤΟΣ ΕΓΡΑΦΣΕΜ. The first represents a youth crouching and holding a krater on his knee, the second a satyr lying down and drinking from a large jar. Similar representations are discussed.—F. STUDNICZKA, *Sacrificial Deceit of Hermes* (cut). A vase in the Royal Imperial Austrian Museum for Art and Industry is published. Hermes,

with winged shoes, long cloak, hat, and caduceus, is leading a black pig to an altar. Behind Hermes a strigil and a sponge are represented. The pig has white legs and the feet of a dog. Evidently, Hermes is cheating the deity to whom the pig should be offered. Similar deceits are referred to in comedy (Epicharmos in Athen., ix. 374 E, Aristophanes, *Acharn.*, 738 ff., Zenobius, i. 100).—F. DUEMMER, *The vases from Kameiros* (3 cuts). Rhodian inscriptions of the sixth century B. C. with an alphabet like that of Gela and Akragas show that this alphabet was used at Rhodes. The Euphorbos-plate, then, with its Argive alphabet, was imported from Argos. The origin of the so-called "Rhodian" style is to be sought at Argos. The pure geometric style prevailed at Rhodes until toward the end of the seventh century B. C. Argive vases were imported and imitated. Two examples of the early rude imitations are published and discussed.—F. WINTER, *Polyphemos* (pl. 6; cut). A krater belonging to Sir Francis Cook in Richmond is published. The style is that of the last part of the fifth century B. C. The Kyklops lies upon the ground in drunken sleep beside a bowl. Odysseus and his companions are preparing to put out his eye. Two satyrs are springing about. Euripides was the first to bring Polyphemos into connection with satyrs. The scene here represented is inspired by Euripides' *Kyklops*, 454–460.—ARCHÄOLOGISCHER ANZEIGER. *Obituary notice of Captain Georg Fr. Luder. Denke.*—*Gymnasial-teaching and Archæology.* Report of measures adopted in Austria to enable teachers in the gymnasiums to travel in Italy and Greece.—ACQUISITIONS OF THE COLLECTIONS OF ANTIQUITIES IN GERMANY. II. *Munich.* Five portraits and some fragments from Fayum; some Roman utensils.—III. *Dresden* (21 cuts). Two marble reliefs from Palmyra, a bronze mirror and a statuette of a dwarf, fourteen terracottas, three vases and some fragments of terracotta frieze-reliefs, and lamps.—IV. *Karlsruhe.* Casts of Egyptian sculptures, imitations of the gold objects found at Pietroassa, a coffin and mummy of a priest from Achmin, a small collection of Cypriote antiquities.—ACQUISITIONS OF THE COLLECTION OF ANTIQUITIES OF THE AUSTRIAN IMPERIAL HOUSE IN VIENNA, 1880–1891 (11 cuts). Only sculptures of stone are described in this number, and of these only the most important. 61 are here described.—THE ARCHÄOLOG. COLLECTION OF THE VIENNA UNIVERSITY. An ornamented belt and two utensils of bronze; a terracotta sarcophagus from Klazomenai (*Antike Denkmäler*, i. 45) and 9 terracotta heads from Tarentum; one black-figured vase-fragment from Vulci; 10 red-figured vases and numerous fragments mostly from Orvieto; 7 marble sculptures, mostly fragmentary; a fragment of relief from Egypt; ten pieces of blue Egyptian smalt.—MUSEUM OF CASTS IN NEW YORK. The project of forming a vast museum of casts in connection with the Metropolitan Museum is advancing toward realization.—PLASTER CASTS. Mr.

Cesare Malpieri in Rome issues a catalogue of 50 casts of Roman antiques for sale.—REPORTS OF MEETINGS OF THE ARCHÆOLOGICAL SOCIETY IN BERLIN, 1891. NOVEMBER. After reports and other business, *Conze* read a letter from *Treu* concerning the existing publications and casts of the torso of a Gaul in Dresden; *Conze* showed a bronze object (pentagon-dodecaedron) probably used in some game; *Winter* showed and discussed 'Εφην. 'Αρχ. 1891 (2 cuts), especially the articles on Mykenai and the Nike of Archermos—the Nike apparently belongs to the base to which it was formerly ascribed; *Curtius*, on the affiliation of deities; *Belger*, on the grave of Hesiod in Orchomenos and the graves of Agamemnon and his family in Mykenai, with discussion of Pausanias; *Diels*, on the Mimiamboi of Herodas and their relation to Alexandrian art; *Hübner*, on an inscription found in Cirencester. DECEMBER. Winckelmannsfest. The report will appear in the next number of the *Anzeiger*.—NEWS OF THE INSTITUTE.—NOTES ON THE PUBLICATIONS OF THE INSTITUTE.—BIBLIOGRAPHY.

HAROLD N. FOWLER.

MITTHEILUNGEN D. K. DEUT. ARCHÄOLOGISCHEN INSTITUTS. ATHENISCHE ABTHEILUNG. Vol. XVI. No. 3. 1891.—A. E. KONTOLEON, *Inscription from Skaptoparene*. This inscription was found in 1868 at Gramadi, near Djumái-bala, near the Stugmon, in Bulgaria. The ancient name of the place was Skaptoparene. It lay 30 miles from Pautalia. The inscription contains a request of the villagers to the emperor M. Antonius Gordianus to free them from the impositions and requisitions of travellers, especially soldiers. This request is in Greek. The emperor's favorable reply is in Latin.—TH. MOMMSEN, *The Inscription from Skaptoparene*. The date of the emperor's reply is Dec. 16, 238 A. D. The agent of the village is a soldier of the praetorian guard. The village belonged to the district of Pautalia, and the governor of that district is the official representative of the village.—TH. MOMMSEN, *Inscription from Apameia Kibotos*. This inscription, discovered by Ramsay, is a fragment in Greek of the decree concerning the new Asiatic calendar established at the suggestion of the proconsul Paullus Fabius Maximus. Part of the Latin text of the proconsul's letter is published *Mith.*, xvi. p. 235. Fragments of the decree from Eumeneia and Apameia are known (*CIG*, 3957, 3902^b). The new fragment and the one from Eumeneia supplement each other.—W. JUDEICH, *Inscriptions from Ionia*. 27 inscriptions, copied by the writer and F. Winter in 1887 in Erythrai, Klazomenai, Priene, and Teos. They are chiefly dedicatory and sepulchral. No. 17, from Teos, records a treaty of *synoikismos* or *sympoliteia* for ten years between the Teans and another community. Taxes, imposts, and duties are specified from which the new citizens are to be free. The first part of the record is wanting.—M. MAYER, *Lamia again* (pls. 9, 10; 3 cuts). A *lekkythos* in

Athens with black figures on light pipe-clay is published and discussed. An ugly, nude woman is tied to a palm-tree. Four satyrs are torturing her. One is pulling out her tongue, one burning her, one whipping her, and one about to strike her with a heavy pestle. A fifth satyr stands quietly by. The female is Lamia, and the scene is taken from the comic stage, though the stage-costume is omitted. A cut gives the painting on a coarse Bœotian vase. An ugly nude female with a swine skin on her head is running to a low table on which stands a jug. Perhaps this is Lamia. Examples of vase-paintings derived from the comic stage are cited. This vase belongs to about the middle of the fifth century B. C. Other vases of similar or related technique are discussed.—P. HERRMANN, *Athlete Head from Perinthos* (pls. 4, 5). The head, here published in three views, is in Dresden (Treu, *Berlin. philol. Woch.*, 1891, p. 546). The tip of the nose is wanting and there are several other slight injuries. The hair over the forehead has been partially chiselled away. The head appears to be a copy of a bronze original of the early fifth century B. C. Comparison with other works, especially with the Massimi Diskobolos, shows that the original of this head is not by Myron. It has points of resemblance to the Naples Harmodios head, and belongs to a series which begins with the Harmodios and ends with the Munich "Diomed." The artist of the original was apparently a slightly older contemporary of Myron, possibly Pythagoras of Rhegion.—W. DÖRPFELD, *The Hypæthral Temple*. The arguments in favor of the theory that many temples were hypæthral are briefly reviewed. The main argument was the testimony of Vitruvius III. 1. The discovery that the Olympieion at Athens was octostyle, not decastyle, destroys that argument. There were a few hypæthral temples, probably open courts surrounded by walls and columns, but, generally speaking, Greek and Roman temples received their only light from the door, and needed no more.—A. WILHELM, *Inscriptions from Messene*. Five inscriptions. *No. 1* is a decree of proxeny, etc., to Menalkos, son of Aristomenes, from Zakynthos (=ᾠρα, June 24, 1890, Παρνασσός, IV. 497). The date assigned is the latter part of the fourth century B. C. The dialect is Messenian. *No. 2* is a fragmentary record of manumission, the first detailed record from Messene. Date, first half of the third century B. C. Local dialect. *No. 3* (=Le Bas 155; Le Bas-Reinach 137) is a dedication by a priest and priestess. *No. 4* is a fragment of rules for sacrifices. The date is about 200 B. C. Local dialect. *No. 5* is from two fragments of a base (=Oikonomakes, τὰ σωζόμενα Ἰθώμης Μεσσηνίας κτλ. 33, 36). The larger fragment *Athen. Mitth.*, VI. 359. The date is not earlier than the end of the second century B. C. The meaning is uncertain.—R. MEISTER, *Archaic Rhodian Epitaphs*. The three archaic inscriptions published by Selivanor, *Mitth.*, XVI. p. 107 ff. (see above), are given with new interpretations.—A. S.

DIAMANTARAS, *Ancient Inscription from Antiphellos in Lykia*. An inscription of Roman times, on a sarcophagus. The names of those entitled to the use of the monument are given, and a curse is invoked upon other users.—LITERATURE.—DISCOVERIES. See *News*. Seven late inscriptions from Thessalonika are published from copies by J. H. Mordtmann. The inscription *Athen. Mitth.* XIV. p. 193 is further discussed.

HAROLD N. FOWLER.

REVUE ARCHÉOLOGIQUE. 1890. July-August.—J. DE MORGAN, *The Prehistoric Nekropoli north of Persia*. In the province of Linkoran were examined nekropoli at Kravéladi, Djüodji-Kach, Hovil, Véri, Mistan, Djüonü, Aspa-Hiz, Hivéri and Razgoour. The burial-places may be classified chronologically and show the transition from the exclusive use of bronze implements to that of iron. Arms, pottery, jewelry were found resembling that of the Ossethoi, who are known to be Aryans, and not far removed from the Greek.—J. A. BLANCHET, *Contributions to the Gallo-Roman Epigraphy of Saintes*. Nine inscriptions thought to have been lost have been found in two MSS. in the National Library.—R. MOWAT, *Inscriptions from the city of the Lingones, preserved at Dijon and at Langres* (contin., pls. x, xi). After mentioning four monuments which are anepigraphic, though originally destined to bear inscriptions, ninety-five inscriptions are here published. Of these five are votive, three are upon public monuments, and the remainder chiefly funerary. The existence of a *colonia Lingonum* having its origin from this town is also established by epigraphic evidence. Seventy-seven names presumably Gallic and occurring in the inscriptions from this region are then given.—L. DELISLE, *Imitation of ancient writing by scribes of the Middle Ages* (pls. XII, XIII). Two examples are here given of copies of earlier documents made at the end of the XII century. One is of a bull of Sergius IV, and another of a privilege accorded by Alexander III, the original documents of which still exist. The peculiarities of the earlier script are imitated so cleverly as to suggest that such documents may have been frequently counterfeited for evil purposes.—AUG. AUDOLLENT, *A winged Victory at the Museum of Constantine* (pl. XIV). This is a small bronze following the type of the Nike of Paionios, and dating from the early Roman Empire. It was found in the town of Cirta, where also was found an inscription referring to a silver statue of Jupiter, bearing in his right hand a silver globe, on which stood a figure of victory, and in his left a silver spear. It is suggested that this victory may have belonged to the statue here mentioned, which would seem to have preserved the type of the Zeus of Pheidias.—S. REINACH, *A Passage in Sidonius Apollinaris. The Pretended Volcanoes in Southern France in the V century*. The citation of Sidonius Apollinaris, Bishop of Clermont from 471 to 475, as attesting the activity of volcanoes in Gaul at this period is founded upon

a misunderstanding, as may be seen by comparing the text of Sidonius with a homily of Saint Avitus concerning the same events.—C. BABIN, *Note on the Use of Triangles in the Proportioning of Greek Monuments*. The purpose of this paper is to show that together with the modular system, by which all the parts of an edifice may be expressed in terms of a common measure, use was made of geometric methods, founded upon triangles, and in particular the equilateral triangle. The use of similar geometrical methods in types of architecture derived from the Greek will be considered in a subsequent paper.—G. JOURDANNE, *Recovery of a Canton of the Aude*. The name of the district of country between the Aude and the Black Mountains in the northern part of the Carcassonne called Carbadès is frequently derived from the Castle of Cabaret. But this name is a modern one. It does not figure in mediæval documents, whereas we do find in such documents the names *Cabardensis*, *Cabardiacus*, and *Cabardiacensis*.—*Monthly Bulletin of the Academy of Inscriptions*.—*National Society of the Antiquaries of France*.—*Archæological News and Correspondence*.—*Bibliography*.—R. CAGNAT, *Review of Epigraphical Publications relating to Roman Antiquity*. April-June.

September-October.—F. RAVAISSON, *The Aphrodite of Melos* (pl. xv). Following the suggestion that the Aphrodite of Melos was associated with a figure of Ares, the Borghese Ares (formerly Achilles) of the Louvre is here utilized, in spite of chronological difficulties, to restore to our imagination the original group. The ring upon the right foot of the Borghese Ares suggests that its prototype was the captive Theseus, and that the original group represented Aphrodite Persephone and Ares Theseus. Of such a character may have been the Aphrodite of the garden commenced by Alkamenes and finished by Pheidias. In later derivatives the notion of Persephoné and Theseus have disappeared. Other monuments preserve for us the same group and details of style more characteristic of the fifth century.—E.-A. PIGEON, *Roman road in the departments of Manche and Ille-et-Vilaine*. By means of the Itinerary of Antoninus and the Table of Peutinger, the Roman road connecting Cherbourg with Rennes may be reëstablished. Its stations, Coriallo, Alauna, Cosediæ or Cosedia, Fanum-Martis or Legedia, Ad Fines, and Condæte are to-day represented by Cherbourg, Valognes, Coutances, Avranches, Romazy and Rennes.—A. LEBÈGUE, *The first excavations in Delos*. A défense of the purpose and conditions of the excavations made by him in Delos in 1873 in reply to the account given by Diehl, *Excursions archéologiques en Grèce*, p. 134.—J. DE MORGAN, *The prehistoric Nekropoleis of Armenian Russia*. The principal conclusions of this elaborate paper are thus summarized: (1) At first, the arts develop amongst the white Allophyloi of the Caucasus without external influence. (2) The people of Lelwar were in commercial relations with

the Assyrians. (3) The Ossethoi brought, in their migration from the Iran to the Caucasus, new arts, which had considerable influence upon the artistic tendencies of the white Allophyloi. (4) The most recent graves of Lelwar are later than the arrival of the Ossethoi (VIII or VII century) and anterior to the Persian conquest (V century).—G. RADET, *The Cities of Pamphylia*. A study of the geography, topography, and history of Pamphylia, based upon Lanckoronski's *Les Villes de la Pamphylie et de la Pisidie*, t. I.—S. REINACH, *Chronique d'Orient*.—*Monthly Bulletin of the Academy of Inscriptions*.—*National Society of the Antiquaries of France*.—*Archæological News and Correspondence*.—*Bibliography*.

November-December.—S. REINACH, *Bronze Head of a horned divinity discovered at Lezoux (Puy-de-Dôme) and belonging to the Museum of Saint Germain* (pl. XVI). This head, designed as an ornament, is of fine Greek workmanship, and exhibits Alexandrine influence. Analogous heads, generally applied to vases, are usually considered as heads of Achelouïs, although no such mythological significance may have entered the mind of the artist.—L. LE PONTOIS, *Exploration of the Tumulus of Cruguel (Morbihan)* (pl. XVII). The burial-trench here exhibits the peculiarity of having been lined with wood. The body, unburned, was buried together with bronze and flint arms. Finely cut arrow-heads, bronze poignards, a granite mortar, and other small objects were found.—G. DUMESNIL, *Note on the Form of the ordinary Numerals*. An unhistoric and purely fanciful hypothesis concerning the origin of the Arabic numerals.—A. MAIGNAN, *Archæological Notes*. A publication of a number of objects of stone and of bronze found during the dredging of the Seine in 1885 near Corbeil.—M. DELOCHE, *Studies on some Seals and Rings of the Merovingian Period* (contin.). CXXVI. Seal-ring of the Jewess Aster. CXXVII. Seal-ring found near Andernach. Monogram not deciphered. CXXVIII. Seal-ring found at Saint-Jean-de-Corcoué (Loire-inférieure). Inscribed OENEOS. CXXIX. Ring found at La Garde (Loire). Ornamented with filigree work, but no inscription. CXXX. Seal-ring found at Kerity (Finistère). A cartouche in the bezil bears the letters SI, the initials of *Signum*. CXXXI. Seal-ring found at Kerland (Finistère). Cross and crown, with two initials. CXXXII. Ring found at Bréhan (Côtes-du-Nord). CXXXIII. Ring found at Maroué (Côtes-du-Nord). CXXXIV. Gold ring from the Gallo-Frankish Cemetery of Herpes (Charente). Resembles the ring found at La Garde (CXXIX). CXXXV. Seal-ring with the initial C doubled, from the Cemetery at Herpes (Charente). CXXXVI. Seal-ring of Gisa, from Herpes. CXXXVII. Another seal-ring from Herpes. Inscribed INTNI. CXXXVIII. Another seal-ring with the initial M, from Herpes. CXXXIX. Another inscribed seal-ring from Herpes. CXL. Another ring from Herpes. The bezil is figured with a Greek cross. CXLI. Another ring from Herpes. The bezil contains a

piece of blue glass, which is set in bronze and this in turn in silver. CXLII. Another ring from Herpes. Ornamented with globules of gold. CXLIII. Another ring from Herpes. The bezil is ornamented with a rosette of garnets. CXLIV. Another ring from Herpes. Contains an antique black-stone intaglio representing Jupiter crowning his eagle. CXLV. Another ring from Herpes. CXLVI. Another ring from Herpes. One of a number found and consisting of a simple band of silver wound as a spiral.—M. SCHWEISTHAL, *Archæological Notes concerning Mount Sipylus*. The first note concerns the sanctuary of Kybele Plastene mentioned by Pausanias as below the throne of Pelops. A ground-plan and careful description are given of a simple sanctuary, which is recognized as that of Kybele Plastene not only from its position, but also from inscriptions and *exvoto* offerings found in its vicinity. The second note treats of the throne of Pelops and the image of Niobe. A third note treats of the ruins of Gueuk-Kaïa, which are recognized as the remains of an Aeolian city.—S. REINACH, *Notice of Henry Schliemann*.—*Monthly Bulletin of the Academy of Inscriptions*.—*Archæological News and Correspondence*.—*Bibliography*.—R. CAGNAT, *Review of Epigraphical Publications referring to Roman Antiquity*. June–December.

1891. January–February.—S. REINACH, *Altar of Mavilly (Côte-D'Or)* (pls. I, II). This monument, formerly in the parish church of Mavilly, now in the park of the chateau at Savigny-sous-Beaune, is here published in héliogravure. The rude Gallo-Roman sculptures represent the twelve divinities of Ennius: Juno, Vesta, Minerva, Ceres, Diana, Venus, Mars, Mercurius, Jovis, Neptunus, Vulcanus, Apollo.—E. LE BLANT, *A wood-engraving in the edition of Terence of 1493* (pl. III). In the edition of Terence published by Trechsel in Lyons in 1493 is represented a Roman theatre, as conceived in the xv century. In front of the theatre is apparently represented the story of St. Didymus and Theodora.—A. S. MURRAY, *Basreliefs of Kyzikos*. Notice of six reliefs in the British Museum, four of which bear inscriptions.—V. WAILLE and P. GAUCKLER, *Inedited Inscriptions from Cherchel*. A publication of fifty-one inedited Latin inscriptions from Cherchel, Algeria.—G. WEBER, *Circular Monument at Ephesos, or the pretended Tomb of St. Luke*. Until Excavations give further light, we must remain contented with seeing in this monument a circular edifice of the second century A. D., when all this part of Ephesos was restored under Antoninus Pius. At a later date, the Christians built a chapel in its ruins and ornamented its entrance with the two pilasters brought probably from the theatre or stadion.—M. BERTHELOT, *The origin of the word bronze*. Five texts from mediæval mss. are cited in support of the author's view, that the word bronze is to be connected with the town *Brundisium*, which according to Pliny produced bronze mirrors of high quality.—A. L.

DELATRE, *The Punic Tombs of Carthage. Necropolis of the hill St. Louis.* An account of six Punic Tombs excavated during the summer and autumn of 1890. They were carefully constructed stone-faced rectangular apartments, hermetically sealed. Objects of gold, silver, bronze, ivory, glass were found; also pottery, some of which bore inscriptions—the first Punic inscriptions found in the old necropolis of Byrsa.—E. MÜNTZ, *Notes on the Christian Mosaics of Italy* (contin.). The mosaics of Siponto, Capua, Vercelli, Olona, and Albenga are here considered.—A. ENGEL, *Excavations made in the neighborhood of Seville.* From October 1889 to March 1890, excavations were made by Engel at *Coria del Rio*, where he found a tile covered tomb; at *Alcolea del Rio*, where he procured curious votive barks; at *Peña de la Sol*, where were uncovered two Roman baths, three pieces of marble sculpture, and other small objects; and at *Italica* were discovered two Roman burial-places with masonry tombs containing black pottery. Time was lacking to explore the *Cerro de la Camorra*, the supposed site of ancient Munda.—C. CHIPIEZ, *The Theatre of Polykleitos, reconstructed according to a modulus by K. Dumon.* A favorable review of Dumon's book.—A. ENGEL, *Note on some Archæological Manuscripts preserved at Seville.*—*Monthly Bulletin of the Academy of Inscriptions.*—*National Society of the Antiquaries of France.*—*Archæological News and Correspondence.*—*Bibliography.*

March-April.—V. WAILLE and P. GAUCKLER, *Inedited Inscriptions from Charchel* (contin. and end). Publication of about one hundred small inscriptions from marble fragments, also from lamps, paterae and vases.—L. HEUZEY, *The Mace of Goudéa.* This mace, presented by M. de Sarzec to the Louvre, is figured in *Découvertes en Chaldée* pl. 25^{bis} fig. 1, a and b. The inscription describes it as a votive offering of Goudéa to the god Nin-Ghirsou, and as made of the stone *shir-gal* (marble) from the mountains of Our-in-ga near the town of Az on the sea of Elam.—A. VERCOUTRE, *Some local African Divinities.* Amongst ancient African divinities mentioned in inscriptions found principally in Numidia, a number have been considered as purely local divinities. Of these, two, *Eruc* and *Malagbel*, are here explained: the former as Deus Erucinus, the Sicilian hero Eryx; the latter, as Baal-Malaca or the Baal of the town Malaca (corrupted to modern Guelma).—A. LEBÈGUE, *Note on some Greek Inscriptions from Gaul.* Some reservations are made to the editing by Mommsen, Hirschfeld, and Kaibel of the Greek Inscriptions of Gaul contributed by him to the collection of the Berlin Academy.—S. GULBELKIAN, *Rug-making in the Orient.* A chapter from a forthcoming work entitled *Voyage dans le Caucase.*—H. OMONT, *Inventory of the Visconti Collection in the Bibliothèque Nationale.* Titles of the papers of Visconti, which form thirty-five volumes. The contents of sixteen volumes are here noted.—H. D'ARBOIS DE JUBAIN-

VILLE, *Linguistic testimony to the community of civilization between the Celts and Germans during the fifth and fourth centuries B. C.* The distinction between the Celts and Germans was not known at Rome prior to the first century B. C. For several centuries before this, the Germans probably lived under Celtic rule. Witness the community of words between Celts and Germans, as distinguished from other Indo-European nations, in matters pertaining to law, military life, home life, geography, furniture, and in names of various material substances. The religious vocabulary of these two peoples has nothing in common, and religion was probably the obstacle which prevented the fusion of the two races.—R. MOWAT, *A diploma given on the departure of a soldier from the army of Pannonia.* This diploma was granted to an auxiliary veteran of the army of upper Pannonia by the Emperor Antoninus Pius on the ninth of October 148 A. D., and contains detailed information concerning that army.—A. ENGEL, *Note on some Spanish Collections.* Notices are given of archæological collections in Alicante, Barcelona, Cordova, Grenada, Jaen, Lorca, Malaga, Murcia, Osuna, Saragossa, Seville, Tarragona, Toledo, Valencia, and, in Portugal, Lisbon.—*Monthly Bulletin of the Academy of Inscriptions.*—*National Society of the Antiquaries of France.*—*Archæological News and Correspondence.*—*Bibliography.*—R. CAGNAT, *Review of Epigraphical Publications relating to Roman Antiquity.* January–March.

ALLAN MARQUAND.

REVUE D'ASSYRIOLOGIE ET D'ARCHÉOLOGIE ORIENTALE. Vol. II. No. 3. 1891.—E. RENAN, *An inedited Phœnician Inscription from Sidon* (pl. II). This inscription, now on exhibition at the Louvre, is on a tall marble pier that served as a base to an offering. It is not easily deciphered. M. Renan reads: "Offering made by Abdmiskar . . . son of Baalsillekh, to his lord Salman. May he bless him!" The Greek work of the *cippus* recalls the mouldings of Um-el-Awamid, which appear like imitations of the Erechtheion: date, about 300 B. C.—L. HEUZÉY, *The Genealogies of Sirpurla, according to M. de Sarzec's discoveries.* Some hitherto inedited historical data founded on a study of the early Babylonian fragments found by M. de Sarzec at Telloh=Sirpurla are here given; a summary of which will also be found in the *News*, on p. 122. In the first place, among the rulers (*patesi*) of Sirpurla, two remained entirely isolated—*Ur-bau* and *Nam-magh-ni*. A circular stone dish shows that *Nam-magh-ni* was the son-in-law of *Ur-bau*, having married his daughter *Gan-ul*. On another stone dish is to be read the name of a new ruler, the *patesi* *Ur-nin-gul*. These are all anterior to king Gudêa. Around the conical base of a small stone column, in characters of the most archaic period (as on the *stele of the vultures*), the names are read of the *patesi* *Ê-anna-du* son of the *patesi* *A-kur-gal*. On the *stele of the vultures*, *A-kur-gal*, whose father's name is given

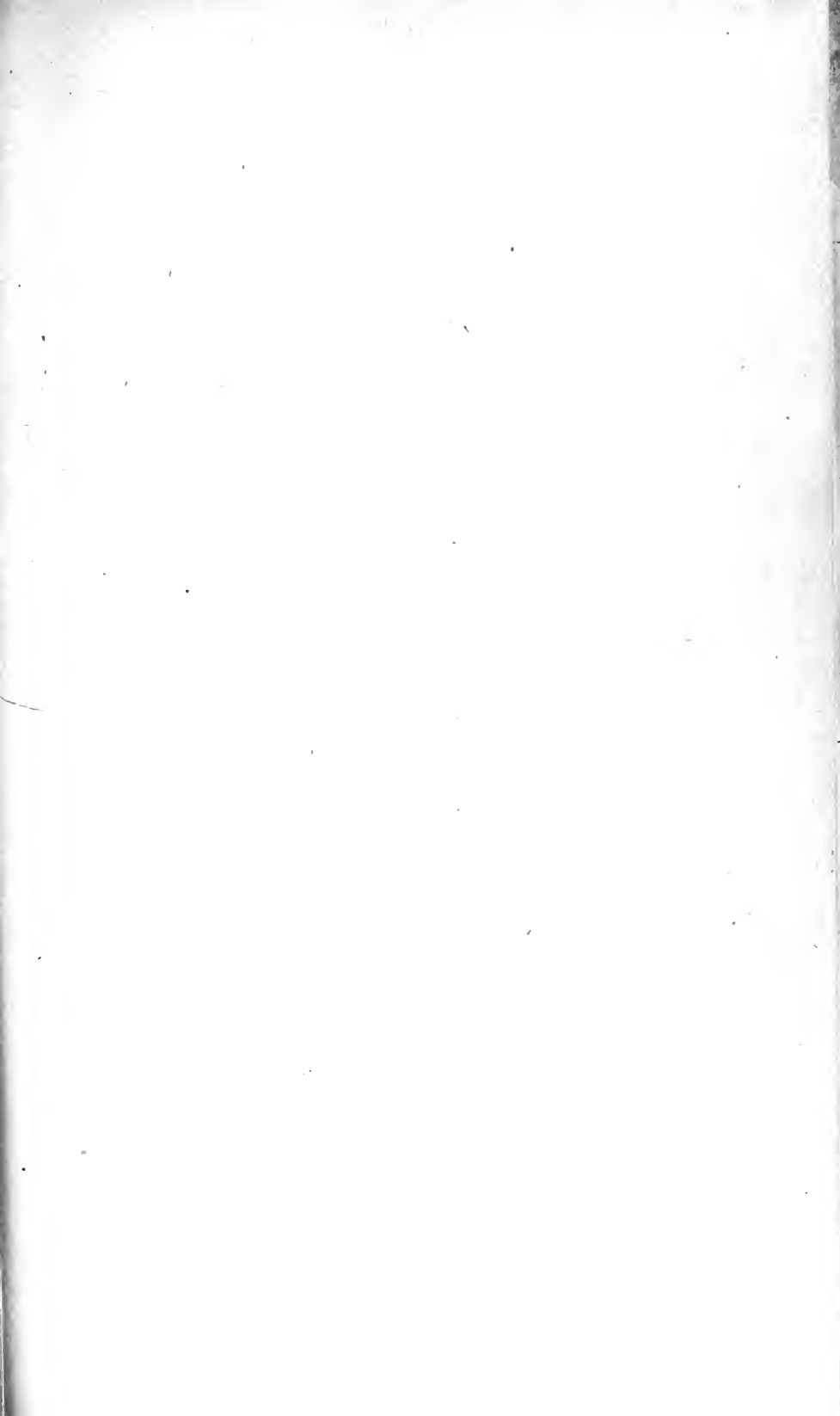
as *Ur-nina*, is called *king* and not *patesi*. Another inscription confirms the suggestion that there was no great distinction between the titles of *patesi* and *king*. It enables the following conflicting genealogies of the earliest rulers of Sirpurla to be made out.

<i>Ur-nina</i> , king.	<i>Ur-nina</i> , king.
<i>En-anna-du</i> I, <i>patesi</i> , elder son.	<i>A-kur-gal</i> , king and <i>patesi</i> .
<i>En-té-na</i> , <i>patesi</i> .	<i>Ê-anna-du</i> , king and <i>patesi</i> .
<i>En-anna-du</i> II, <i>patesi</i> .	

These two lists appear to show that a period of dynastic trouble followed the death of old King *Ur-nina*, probably caused by the rivalry of his sons, leading to a confusion of titles. Another consequence of the present conjunction of the ancient line of *patesi* with the royal dynasty of *Ur-nina* is, that the ancient king *Uru-ka-ghi-na* must belong either to an earlier or to a later dynasty, because *Ur-nina*'s father and grandfather bore no titles: he was the founder of his dynasty.—J. OPPERT, *Archæic Inscriptions on three Chaldean bricks*. The first of these inscriptions, which belong (like those illustrated in the preceding article) to M. de Sarzec's discoveries, is a brick of king *Ur-nina* translated: "*Ur-nina*, king of Sirpurla, son of *Ni-ni-hal-du* has made the *ap-Girsu*." The thing mentioned is of undetermined character in the quarter of the city called *Girsu*. The second is a long inscription of *E-anna-du*, son of *A-kur-gal*, speaking of his building the city of *Nina*, of conquests in the mountains of *Elam* and the lands of *Is* and *Arc*. The third inscription is of the *patesi* *En-té-na*, son of *En-anna-du*, gives his genealogy, and mentions his building of the *ap-gi* of *Ningirsu*: to this should be compared a second inscription of the same ruler which speaks of his construction of the *ap-gi-gi-ka-na* of the god *Ningirsu*. Besides this, the father of *Enténa*, *En-anna-du* I, who places himself like his son under the patronage of the divinity of *Dunsir*, calls himself the constructor of an *ap-bi-ru*. These various things are considered by M. Heuzey to refer to hydraulic works—reservoirs, basins, wells, etc.—J. OPPERT, *The Freedom of Woman in Babylon*. The document used as text says that, in the 35th year of *Nebuchadnezzar*, a mother (*Silim-Ištar*) cedes, during her lifetime, to her daughter (*Gula-kaisat*) the half-ownership of her entire property, thus renouncing her rights of ownership and the free disposal of her property, reserving however the usufruct during her lifetime. The daughter is required not to transmit this property to any but her husband, who is responsible to her. On the mother's death, the half-ownership of the daughter becomes complete ownership exempt from conditions.

Into this is not reckoned the property which the daughter brought as a dot to her husband. The husband takes no part in the transaction. This liberty of woman in the matter of property in the ancient East is in striking contrast with her enslaved condition in Europe especially in Rome.—E. LEDRAIN, *Bronze Statuette with the name of Ašur-dan*. There is in the Louvre a headless bronze statuette of a figure in Assyrian costume. On the front of the robe is a much-defaced inscription in twelve lines, the first phrase of which is interesting for historical reasons, and is translated: "To Ištar, the great lady, dwelling in the temple of the lady of the world in the city Arbela, for the life of Ašur-dan, king of Aššur, son of Šamši-Bel, son of . . . , son of Nirgal-iddin-aha, son of . . ." This is evidently Ašur-dan III who reigned from 773 to 756 and was the successor, perhaps the brother, of Shalmaneser II. Until now his genealogy was unknown. The rest of the text mentions a bronze statue of Ištar.—E. LEDRAIN, *Some inedited Inscriptions added to the Louvre*. (1) Phœnician scaraboid with a hippocamp and the owner's name, *Pa'ar*. (2) Persian cone with a disk between two (Horus) eyes and the inscription: "to Ahiman, son of Bohas." (3) Basrelief (on a calcareous stone from Palmyra) of a man reclining on the funeral couch, and a woman seated. The names given in the inscription are *Malku* and *Dida* his wife. (4) Female bust from Palmyra with the name [*Bar*]'ada. (5) Palmyrene tessera with the name *Ba'althā*. (6) Palmyrene tessera with the name *Thaimretsu*. (7) Palmyrene tessera with the divine names *Malakbel*, *Gad* and *Thaimi* and the name *Iarhai*.—L. HEUZÉY, *Spanish Statues of Græco-Phœnician style: a question of authenticity*. This important paper which discloses an entirely new phase of Phœnician sculpture, an echo, in Spain, of archaic Greek sculpture, has been already fully summarized in the *News of the Journal* (vol. VI, pp. 388-9).

A. L. F., JR.





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